

# Operation Manual

**DVD AV RECEIVER** 

# AVH-P7950DVD



English

## Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, keep this manual in a safe place for future reference.

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#### Be sure to read this

- Playable discs 8
- DVD video disc region numbers 8
- When an operation is prohibited 12

## Precautions

IMPORTANT SAFEGUARDS 6
To ensure safe driving 6

To avoid battery exhaustion 7

## 12 Before You Start

About this unit 8

About this manual 9

Visit our website 9

Features 9

About WMA 11

About AAC 11

About DivX 11

To protect the LCD screen 12
For viewing LCD comfortably 12

NAME AND A DATE OF THE PARTY OF

What the marks on DVDs indicate 12

Resetting the microprocessor 12

Feature demo mode 13

Use and care of the remote control 13

### (13) What's What

Head unit 15

Sub-display 16

Remote control 17

### (14) Basic Operations

Turning the unit on and selecting a

source 21

Adjusting the volume 22

Turning the unit off 22

Using the rear display 22

Touch panel key basic operation 23

Opening and closing the LCD panel 24

Protecting your unit from theft 25

Built-in DVD player basic operations 26

## ① Tuner

Listening to the radio 28

Storing and recalling broadcast

frequencies 28

Introduction of advanced tuner

operation 29

Tuning in strong signals 29

Storing the strongest broadcast

frequencies 30

### (15) Playing DVD discs

Watching a DVD 31

Selecting titles from the title list 32

Displaying information of DVD-VR 32

Listening to a DVD audio 33

Operating the DVD menu 34

Browsing still pictures 34

Skipping back or forward to another title/

group 34

Selecting the play mode 35

Resume playback (Bookmark) 35

Frame-by-frame playback 35

Slow motion playback 35

Searching for the part you want to play 35

Changing audio language during playback

(Multi-audio) 36

Changing the subtitle language during

playback (Multi-subtitle) 36

Changing the viewing angle during playback

(Multi-angle) 37

Automatic playback of DVDs 37

Introduction of advanced DVD operation 3

Repeating play 38

Playing tracks in random order 38

Scanning tracks 38

Selecting audio output 38

### Playing Video CDs

Watching a Video CD 40

PBC playback 40 Frame-by-frame playback 41 Slow motion playback 41 Searching for a desired scene, starting playback from a specified time 41 Introduction of advanced Video CD operation 42
operation 42 Repeating play 42 Selecting audio output 42

## 1 Playing CDs

Listening to a CD 43
Selecting tracks from the track title list 43
Displaying text information on CD TEXT discs 43
Introduction of advanced CD operation 44
Repeating play 44
Playing tracks in random order 45
Scanning tracks of a CD 45

## 19 Playing compressed audio

Listening to compressed audio 46

Displaying information on compressed audio 47
Introduction of advanced built-in DVD player (compressed audio) operation 48

Selecting tracks from the file name list 47

Repeating play 48
Playing tracks in random order 48

Scanning folders and tracks 48

## 1 Playing DivX/JPEG files

Watching a DivX/JPEG 49
Viewing a JPEG slideshow 50
Playing DivX® VOD content 50
Selecting files from the file name list 51
Displaying text information on DivX/JPEG disc 51
Frame-by-frame playback 51
Slow motion playback 51

Searching for the part you want to play 51

Changing audio language during playback (Multi-audio) 52
Changing the subtitle language during playback (Multi-subtitle) 52
Introduction of advanced built-in DVD player (DivX/JPEG) operation 53
Repeating play 53
Playing files in random order 53

## Multi-CD Player

Listening to a CD 54
Pausing CD playback 54
Selecting tracks from the track title list 55
Displaying text information on CD TEXT discs 55
Introduction of advanced multi-CD player operation 56
Repeating play 56
Playing tracks in random order 56
Scanning CDs and tracks 56
Using compression and bass emphasis 57
Using ITS playlists 57

## Playing songs on iPod

Listening to songs on your iPod 59
Browsing for a song 59
Pausing a song 60
Displaying text information on iPod 60
Displaying information on song 60
Repeating play 60
Playing songs in a random order (shuffle) 60

### Bluetooth Audio

Listening to songs on BT Audio (Bluetooth audio player) 61
Introduction of advanced BT Audio operation 62
Connecting a Bluetooth audio player 62
Disconnecting a Bluetooth audio player 63

1

Bluetooth Telephone Hands-free phoning with cellular phones featuring Bluetooth wireless technology 64 Setting up for hands-free phoning 65 Basic operation of hands-free phoning operation 66 Connecting a cellular phone 67 Deleting a registered phone 67 Connecting a cellular phone 67 Deleting a registered phone 67 Connecting to a registered cellular phone 68 Using the Phone Book 68 Using the Phone Book 68 Using the Phone Book 68 Using preset numbers 71 Making a call by entering phone number 71 Clearing memory 71 Setting the automatic answering 72 Setting the automatic rejecting 72 Switching the ring tone 72 Setting the automatic rejecting 72 Switching the ring tone 72 Setting the dilustooth Device) address 72  TV tuner Watching the television 73 Storing and recalling broadcast stations sequentially 74 Selecting the area group 75  DVD Player  Repeating play 78 Playing tracks in random order 78 Scanning tracks of a CD and compressed audio 78 Scanning tracks in random order 78 Scanning tracks of a CD and compressed audio 78 Selecting audio output 79  Introduction to built-in DSP features 80 Introduction of audio adjustments 82 Using belance adjustment 82 Using the direct control 83 Using the dynamic range control 85 Using the dynamic range control 85 Using the dynamic range control 85 Using the down-mix function 85 Using the dynamic range control 83 Listening in surround sound 84 Introduction of sound settings 86 Switching between the multi-channel output and 2-channel output 86 Introduction of sound settings 86 Switching the speaker output level	Displaying BD (Bluetooth Device) address 63	Selecting a disc 77 Introduction of advanced DVD player operation 78
Watching the television 73 Storing and recalling broadcast stations Introduction of advanced TV tuner operation 74 Storing the strongest broadcast stations sequentially 74 Selecting the area group 75  Adjusting the speaker output levels 94 Using the auto-equalizer 96 Storing the adjusted audio settings in memory 96 Editing the name of sound settings 96 Auto TA and EQ (auto-time alignment and auto-equalizing) 96  18 Setup Introduction of setup adjustments 100	Bluetooth Telephone  Hands-free phoning with cellular phones featuring Bluetooth wireless technology 64  Setting up for hands-free phoning 65  Basic operation of hands-free phoning 65  Introduction of advanced hands-free phoning operation 66  Connecting a cellular phone 66  Disconnecting a cellular phone 67  Registering connected cellular phone 67  Deleting a registered phone 67  Connecting to a registered cellular phone 68  Using the Phone Book 68  Using the Call History 70  Using preset numbers 71  Making a call by entering phone number 71  Clearing memory 71  Setting the automatic answering 72  Setting the automatic rejecting 72  Switching the ring tone 72  Echo canceling and noise reduction 72  Displaying BD (Bluetooth Device)	operation 78 Repeating play 78 Playing tracks in random order 78 Scanning tracks of a CD and compressed audio 78 Selecting audio output 79  17 Audio Adjustments Introduction to built-in DSP features 80 Introduction of audio adjustments 82 Using balance adjustment 82 Adjusting source levels 83 Using the direct control 83 Listening in surround sound 83 Using the dynamic range control 85 Using the down-mix function 85 Switching the sound settings 86 Switching between the multi-channel output and 2-channel output 86 Introduction of sound settings 87 Using the position selector 87 Recalling equalizer curves 88 Adjusting 3-band parametric equalizer 88 Adjusting 13-band graphic equalizer 90 Setting the speaker setting 91
DVD Player Introduction of setup adjustments 100	Watching the television 73 Storing and recalling broadcast stations 73 Introduction of advanced TV tuner operation 74 Storing the strongest broadcast stations sequentially 74	Adjusting the speaker output levels <b>94</b> Using the auto-equalizer <b>96</b> Storing the adjusted audio settings in memory <b>96</b> Editing the name of sound settings <b>96</b> Auto TA and EQ (auto-time alignment and
District and distr	DVD Player	•

Setting the AV input 100

Setting the automatic open function 101

Playing a disc 76

Turning the DVD player on or off **77** 

Ð

Adjusting the LCD panel slide position 102	Changing languages for CAUTION 111
Setting the clock 102 Setting the video of rear display 102 Switching the dimmer setting for sub- display 102 Adjusting the contrast for the sub- display 102	21 Other Functions Switching the button illumination Switching the display on the sub- display 112 Adjusting the screen 112 Selecting the background display 114
<ul> <li>Setting up the DVD player</li> <li>Introduction of DVD setup adjustments</li> <li>Setting the subtitle language</li> <li>Setting the audio language</li> <li>Setting the menu language</li> <li>103</li> <li>Setting the menu language</li> </ul>	Adjusting the response positions of the touch panels (Touch Panel Calibration) 114 Using the AUX source 115 Using the PGM button 115
Switching the assist subtitle on or off Setting the angle icon display 104 Setting the aspect ratio 104 Setting the parental lock 105 Setting the still picture 106 To play back bonus groups 106 Displaying your DivX® VOD registration code 106 Setting the DivX subtitle file 106 Setting remote control code type 107	Additional Information Troubleshooting 117 Error messages 119 Understanding auto TA and EQ error messages 120 DVD player and care 121 DVD discs 121 DVD-R/DVD-RW discs 121 AVCHD recorded discs 122 CD-R/CD-RW discs 122
Adjusting initial settings 108 Setting the FM tuning step 108 Setting the AM tuning step 108 Switching the warning tone 108 Switching the auxiliary setting 109 Correcting distorted sound 109 Switching the sound muting/ attenuation 109 Switching the automatic disc playback 109 Resetting the audio functions 110 Switching the DSP setting mode 110	Dual Discs 122 WMA, MP3 and AAC files 122 About folders and compressed audio files 124 JPEG picture files 125 DivX video files 125 Using the display correctly 126 Language code chart for DVD 128 DSP adjustment value record sheet 129 Terms 131 Specifications 135
Setting the DSP setting mode 110  Setting the optical input 110  Setting the TV signal 110	● Index 137

Entering PIN code for Bluetooth wireless

Setting the security indicator 111

connection 111

#### **Precautions**

### **IMPORTANT SAFEGUARDS**

Please read all of these instructions regarding your display and retain them for future reference.

- 1 Read this manual fully and carefully before operating your display.
- 2 Keep this manual handy as a reference for operating procedures and safety information.
- 3 Pay close attention to all warnings in this manual and follow the instructions carefully.
- 4 Do not allow other persons to use this system until they have read and understood the operating instructions.
- 5 Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- On not operate this display if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and make necessary adjustments.
- 7 Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- 8 Never use headphones while driving.
- 9 To promote safety, certain functions are disabled unless the parking brake is on, and the vehicle is not in motion.
- 10 Never set the volume of your display so high that you cannot hear outside traffic and emergency vehicles.



#### WARNING

 Do not attempt to install or service your display by yourself. Installation or servicing of the display by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.

## To ensure safe driving



#### **WARNING**

- LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.
- To avoid the risk of damage and injury and the potential violation of applicable laws, this unit is not for use with a video screen that is visible to the driver.
- To avoid the risk of accident and the potential violation of applicable laws, the front DVD or TV (sold separately) feature should never be used while the vehicle is being driven. Also, rear displays should not be in a location where it is a visible distraction to the driver.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed and this unit's DVD features should not be used.

#### **Precautions**

When you attempt to watch a DVD, Video CD or TV while driving, the warning **Viewing of front seat video source while driving is strictly prohibited.** will appear on the front display.

To watch a DVD, Video CD or TV on the front display, park your vehicle in a safe place and apply the parking brake.

## When using a display connected to REAR DISPLAY OUT

This unit's **REAR DISPLAY OUT** is for connection of a display to enable passengers in the rear seats to watch the DVD or TV.



**NEVER** install the rear display in a location that enables the driver to watch the DVD or TV while driving.

## To avoid battery exhaustion

Be sure to run the vehicle engine while using this unit. Using this unit without running the engine can result in battery drainage.

When no power is supplied to this unit because of a replacement of the vehicle battery or for some similar reason, the microcomputer of this unit is returned to its initial condition except audio settings. Although audio adjustment information is stored in this unit for several hours, we recommend that you transcribe the data. You can fill the data in the sheet on 129.



Do not use with vehicles that do not feature an ACC position.

#### **About this unit**



#### CAUTION

- Do not allow this unit to come into contact with liquids. Electrical shock could result.
   Also, this unit damage, smoke, and overheat could result from contact with liquids.
- "CLASS 1 LASER PRODUCT"
   This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.
- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so that you can hear sounds from outside the vehicle.
- Protect this unit from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed.
- If this unit does not operate properly, contact your dealer or nearest authorized Pioneer Service Station.

### **Playable discs**

DVD, Video CD and CD discs that display the logos shown below can be played back on this player.

#### **DVD** audio



#### **DVD** video



#### Video CD



#### CD





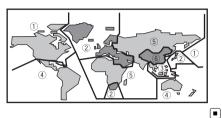
## **Notes**

- is a trademark of DVD Format/Logo Licensing Corporation.
- This player can only play back discs bearing the marks shown above.

## **DVD video disc region numbers**

DVD video discs that have incompatible region numbers cannot be played on this player. The region number of the player can be found on the bottom of this unit.

The illustration below shows the regions and corresponding region numbers.



## **About this manual**

This unit features a number of sophisticated functions ensuring superior reception and operation. All the functions have been designed for the easiest possible use, but many are not self-explanatory. This operation manual will help you benefit fully from this unit's potential and to maximize your listening enjoyment. We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using this unit. It is especially important that you read and observe **WARNING**s and **CAUTION**s in this manual.

### Visit our website

Visit us at the following site:

### http://pioneer.jp/group/index-e.html

 We offer the latest information about Pioneer Corporation on our website.

### **Features**

#### **Touch panel key operation**

It is possible to operate this unit by using touch panel key.

#### **DVD** audio playback

It is possible to play back DVD audio.

#### **DVD-R/RW** compatibility

It is possible to play back DVD-R/RW discs recorded with the video format and Video Recording format. (Refer to *DVD-R/DVD-RW discs* on page 121.)

#### **Video CDs featuring PBC compatibility**

It is possible to play back Video CDs featuring PBC (playback control).

#### CD playback

Music CD/CD-R/RW playback is possible.

#### MP3 file playback

You can play back MP3 files recorded on CD-R/RW/ROM and DVD-R/RW/ROM (ISO9660 Level 1/Level 2 standard recordings).

Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit http://www.mp3licensing.com.

### WMA file playback

You can play back WMA files recorded on CD-R/RW/ROM and DVD-R/RW/ROM (ISO9660 Level 1/Level 2 standard recordings).

#### **AAC file playback**

You can play back AAC files recorded on CD-R/RW/ROM and DVD-R/RW/ROM (ISO9660 Level 1/Level 2 standard recordings).

#### DivX® video file playback

You can play back DivX video files recorded on CD-R/RW/ROM and DVD-R/RW/ROM.

#### JPEG picture file playback

You can play back JPEG picture files recorded on CD-R/RW/ROM.

## NTSC, PAL, PAL-M (for South America) and SECAM (for Russian) compatibility

This unit is NTSC/PAL/PAL-M/SECAM system compatible. When connecting other components to this unit, be sure components are compatible with the same video system otherwise images will not be correctly reproduced.

#### **Dolby Digital EX/DTS-ES compatibility**

You can enjoy the atmosphere and excitement provided by DVD movie and music software featuring 5.1 channel recordings.

 Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.



 "DTS" and "DTS-ES | Neo:6" are registered trademarks of DTS, Inc. "96/24" is a trademark of DTS, Inc.



#### **Multi-aspect**

Switching between wide screen, letterbox and panscan display is possible.

#### Multi-audio

You can switch between multiple audio systems recorded on a DVD as desired.

#### Multi-subtitle

You can switch between multiple subtitle languages recorded on a DVD as desired.

#### Multi-angle

You can switch between multiple viewing angles of a scene recorded on a DVD as desired.

#### **Hands-free phoning**

Using Bluetooth adapter (e.g. CD-BTB100), this unit realizes effortless hands-free phoning with Bluetooth wireless technology.

• In some countries, CD-BTB100 is not sold on the market.

#### Bluetooth audio player compatibility

Using Bluetooth adapter (e.g. CD-BTB100), you can control Bluetooth audio player featuring Bluetooth wireless technology.

 In some countries, CD-BTB100 is not sold on the market

#### iPod® compatibility

When you use this unit with an interface adapter for iPod (CD-IB100II) (sold separately), you can control an iPod with Dock Connector.

• iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

## **Mote**

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

#### **About WMA**



The Windows Media<sup>™</sup> logo printed on the box indicates that this unit can play back WMA data

WMA is short for Windows Media Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.

 Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

## Motes

- This unit may not operate correctly depending on the application used to encode WMA files.
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.

 There may be a slight delay when starting playback of WMA files encoded with image data.

#### About AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG 2 and MPEG 4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode.

This unit plays back AAC files encoded by iTunes® version 6.0.5.

• iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.

### **About DivX**



DivX is a compressed digital video format created by the DivX® video codec from DivX, Inc. This unit can play DivX video files recorded on CD-R/RW/ROM and DVD-R/RW/ROM discs. Keeping the same terminology as DVD video, individual DivX video files are called "Titles". When naming files/titles on a CD-R/RW or a DVD-R/RW disc prior to burning, keep in mind that by default they will be played in alphabetical order.

Official DivX® Certified product
Plays all versions of DivX® video (including
DivX® 6) with standard playback of DivX®
media files

 DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

## To protect the LCD screen

- Do not allow direct sunlight to fall on the display when this unit is not being used.
   Extended exposure to direct sunlight can result in LCD screen malfunction due to the resulting high temperatures.
- When using a cellular phone, keep the antenna of the cellular phone away from the display to prevent disruption of the video by the appearance of spots, colored stripes, atc.
- Never touch the screen with anything besides your finger when operating the touch panel function. The screen can scratch easily.

## For viewing LCD comfortably

Due to its construction, the viewing angle of the LCD screen is limited. You can adjust it by changing either screen size or picture adjustment.

### Changing the wide screen size

By changing the screen size from 4:3 to 16:9, you can adjust the screen so that the screen can fit to the video image you are playing. For details concerning operation, refer to *Changing the wide screen mode* on page 112.

### Changing the picture adjustment

You can make the best adjustment to the picture display by changing **BRIGHTNESS**, **CONTRAST**, **COLOR** and **HUE**. You can also dim or enlight the overall picture image using **DIMMER** 

For details concerning operation, refer to Changing the picture adjustment on page 113.

# What the marks on DVDs indicate

The marks below may be found on DVD disc labels and packages. They indicate the type of images and audio recorded on the disc, and the functions you can use.

	.,
Mark	Meaning
<u>@))</u>	Indicates the number of audio systems.
2	Indicates the number of subtitle languages.
<u>2</u>	Indicates the number of viewing angles.
16:9 LB	Indicates the picture size (aspect ratio: screen width-to-height ratio) type.
	Indicates the number of the region where playback is possible.

### When an operation is prohibited

When you are watching a DVD and attempt to perform an operation, it may not be performed because of the programming on the disc.
When this happens, the icon oppears on the screen.

## **Resetting the microprocessor**

Pressing **RESET** lets you reset the microprocessor to its initial settings without changing the bookmark information.

The microprocessor must be reset under the following conditions:

Prior to using this unit for the first time after installation

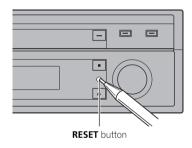
- If the unit fails to operate properly
- When strange or incorrect messages appear on the display



If you press **RESET**, all memorized settings are erased. For this reason, we recommend that you record the settings in the sheet on page 129 after you have completed audio adjustments.

#### 1 Turn the ignition switch OFF.

## 2 Press RESET with a pen tip or other pointed instrument.





After completing connections or when you want to erase all memorized settings or return the unit to its initial (factory) settings, switch your engine ON or set the ignition switch to ACC ON before pressing **RESET**.

### Feature demo mode

The feature demo automatically starts when you select the source **OFF**. The demo continues while the ignition switch is set to ACC or ON. To cancel the feature demo, press and hold **ATT**. To restart the feature demo, press and hold **ATT** again. Remember that if the feature demo continues operating when the car

engine is turned off, it may drain battery power.



The red lead (ACC) of this unit should be connected to a terminal coupled with ignition switch on/off operations. If this is not done, the vehicle battery may be drained.

# Use and care of the remote control

### Installing the battery

Slide the tray out on the back of the remote control and insert the battery with the plus (+) and minus (–) poles pointing in the proper direction.

• When using for the first time, pull out the film protruding from the tray.





#### WARNING

Keep the battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.



### CAUTION

- Use only one CR2025 (3 V) lithium battery.
- Remove the battery if the remote control is not used for a month or longer.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not handle the battery with metallic tools.
- Do not store the battery with metallic materials.

- In the event of battery leakage, wipe the remote control completely clean and install a new battery.
- When disposing of used batteries, please comply with governmental regulations or environmental public institutions' rules that apply in your country/area.

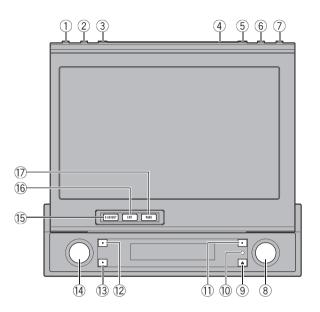
### Using the remote control

Point the remote control in the direction of the front panel to operate.

• The remote control may not function properly in direct sunlight.

## [ Important

- Do not store the remote control in high temperatures or direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedal.



### **Head unit**

#### 1 DISPLAY button

Press to turn the information display on or off when the video is displayed.

#### PGM button

Press to operate the preprogrammed functions for each source. (Refer to *Using the PGM button* on page 115.)

#### (3) FLIP DOWN button

Press to turn the LCD panel horizontal temporarily from upright position.

### 4 Ambient light sensor

Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

#### ⑤ OPEN/CLOSE button

Press to open or close the LCD panel.

#### 6 BAND/ESC button

Press to select among three FM bands and to cancel the control mode of functions.

#### 7 ATT button

Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

Press and hold to switch the demonstration mode ON or OFF. (Refer to *Feature demo mode* on page 13.)

#### **8** Joystick

Move to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

#### 

Press to eject a disc from this unit. Press and hold to open or close the front panel.

#### What's What

#### 10 RESET button

Press to return to the factory settings (initial settings).

#### (1) SOUND SETTING button

Press to select the sound setting.

Press and hold to switch the button illumination color.

#### REAR ON button

Press to switch between the video sources (such as **DVD** or **AV**) on rear display.

#### 13 2CH/Multi CH button

Press to switch between the multi-channel output and 2-channel output.

Press and hold to switch between the displays on the sub-display.

#### (14) SOURCE button, VOLUME

This unit is turned on by selecting a source. Press to cycle through all the available sources.

Press and hold to turn the unit off.
Rotate it to increase or decrease the vo-

#### 15 V.ADJUST button

Press to display the picture adjustment menu.

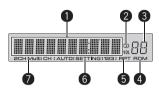
#### 16 ENTERTAINMENT button

Press to display the entertainment menu.

#### (7) WIDE button

Press to select a desired mode for enlarging a 4:3 picture to a 16:9 one.

## **Sub-display**



#### Source display

Shows the status of selected source.

#### 2 Stereo (3) indicator

Shows when the selected frequency is being broadcast in stereo.

#### S Volume level indicator

Shows the value of current volume level.

#### A RDM indicator

Shows when random play is turned on.

#### 6 RPT indicator

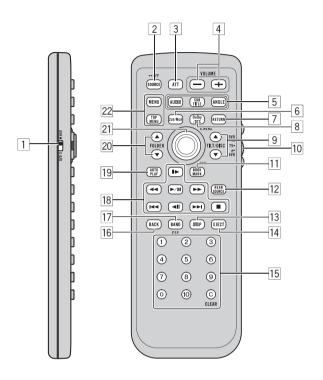
Shows when repeat play is turned on.

#### 6 Sound setting indicator

Shows what the sound setting has been selected.

#### Output setting indicator

Shows what the output setting has been selected.



### **Remote control**

	Button names	AVH mode	DVD mode with remote control code AVH
1	Remote control selection switch	Switch to change the setting of the remote control. For details, refer to Setting remote control code type on page 107.	
2	SOURCE button	Press to cycle through all the available sources. Press and hold to turn the source off.	
3	ATT button	Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.	
4	<b>VOLUME</b> buttons	Press to increase or decrease the volume.	
	AUDIO button Press to change the audio language during DVD playback.		layback.
5	<b>SUBTITLE</b> button	Press to change the subtitle language during DVD playback.	
	ANGLE button	Press to change the viewing angle during DVD play	yback.

## **What's What**

	Button names	AVH mode	DVD mode with remote control code AVH
6	2ch/Mch but- ton	Press to switch between the multi-channel output and 2-channel output.	
7	RETURN button	Press to display the PBC (playback control) menu during PBC playback. When playing DVD video, press to return to the manufacturer-set position on the disc.	
8	<b>Dolby/DTS</b> button	Press to switch between surround sound setting (Dolby Pro Logic II or DTS Neo:6).	
9	▲/▼ buttons (TILT/DISC)	Press to adjust the LCD panel angle.	Not used.
10	Remote control operation mode switch	Switch the operation mode between <b>AVH</b> , <b>DVD</b> and <b>TV</b> modes. Normally, set to <b>AVH</b> . For details, refer to <i>Using the remote control operation mode switch</i> on the next page.	
11	BOOKMARK button	Press to operate the preprogrammed functions for each source. (Refer to <i>Using the PGM button</i> on page 115.)	Press to turn the bookmark function on or off. For details, refer to <i>Resume playback (Bookmark)</i> on page 35.
12	REAR SOURCE button	Press to switch between the video sources (such as <b>DVD</b> or <b>AV</b> ) on rear display.	
13	<b>DISPLAY</b> button	Press to turn the information display on or off when the video is displayed.	
14	<b>EJECT</b> button	Press to eject a disc from this unit. Press and hold to bookmark a disc at the point you want to bookmark.	Not used.
15	0 to 10 buttons, CLEAR button	Press 0 to 10 to input numbers. Buttons 1 to 6 can operate the preset tuning for the tuner or disc changing for DVD player or multi-CD player. Press CLEAR to clear the input numbers.	Press to select a menu item on Video CDs featuring PBC (playback control) or DVD video.
16	BACK button	Press to return to the previous display.	Not used.
17	BAND/ESC but- ton	Press to select among three FM bands and to cancel the control mode of functions.  Press to switch between media file types. (Refer to Switching the media file type on page 27.)	Press to switch between media file types. (Refer to Switching the media file type on page 27.)

	Button names	AVH mode	DVD mode with remote control code AVH	
	PLAY/PAUSE (►/II) button	Press to switch sequentially between playback and pause.		
	REVERSE (◀◀) button	Press to perform fast reverse.		
	FORWARD (►►) button	Press to perform fast forward.		
18	PREVIOUS (I◀◀) button	Press to return to the previous track (chapter).		
	NEXT (►►I) button	Press to go to the next track (chapter).		
	STEP (II►/∢II) buttons	Press to move ahead one frame at a time during DVD/VideoCD playback. Press and hold for one second to activate slow playback.		
	STOP (■) but- ton	Press to stop playback.		
19	AUTO PLAY button	Press to turn the DVD auto-playback function on or off.		
20	▲/▼ buttons (FOLDER)	Press to select the next/previous title, group or folder.		
21	Thumb pad	Move to do fast forward, reverse and track search controls. Click to recall <b>AUDIO MENU</b> .	Move to select a menu on the DVD menu.	
	MENU button	Press to display the DVD menu during DVD playback.		
22	TOP MENU button	Press to return to the top menu during DVD playback.		

# Using the remote control operation mode switch

There are three remote control operation modes on the remote control.

### **AVH mode operation**

When operating this unit by remote control, the mode is normally switched to **AVH**.

 The thumb pad on the remote control can perform the same operations as the joystick on the head unit. Furthermore, the thumb pad can perform the same operations as the touch panel keys ↑, ↓, ← and →.

- 1 to 6 can perform the same operations as the preset tuning keys P1 to P6 and the disc selection keys 01 to 06.
  - If you want to select a disc located at 7 to 12 by using buttons 1 to 6, press and hold the corresponding numbers, such as 1 for disc 7, until the disc number appears in the display.

### **DVD mode operation**

If you switch the mode to **DVD**, the thumb pad and **0** to **10** operations are changed for DVD player.

### What's What

## • When you want to operate the following functions, switch the mode to DVD:

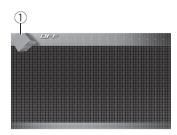
- When operating the DVD menu by using the thumb pad. (Refer to Operating the DVD menu on page 34.)
- When browsing still pictures by using the thumb pad. (Refer to Browsing still pictures on page 34.)
- When operating the PBC menu by using 0 to 10. (Refer to Watching a Video CD on page 40.)

#### TV mode operation

TV operations available with a Pioneer TV tuner (e.g. GEX-P5750TV (P)) can be controlled with **AVH** mode. **TV** mode is not used with this unit.

- For details concerning operation, refer to the TV tuner's operation manuals.
- When you want to operate the following functions only on the rear display, switch the mode to TV:
  - When performing manual or seek tuning by moving the thumb pad left or right.
  - When recalling preset stations by moving the thumb pad up or down. ■

# Turning the unit on and selecting a source



#### 1 Source icon

Shows which source has been selected.

You can select a source you want to listen to. If **DVD DISC AUTO** is turned on, load a disc in the unit to switch to **DVD** (refer to *Switching the automatic disc playback* on page 109).

# • When using the touch panel keys, touch the source icon and then touch the desired source name.

The source names are displayed and selectable ones are highlighted.

- **DVD** Built-in DVD player
- S-DVD DVD player/multi-DVD player
- M-CD Multi-CD player
- FM FM tuner
- AM AM tuner
- **TV** Television
- AV1 AV 1 input
- **AV2** AV 2 input
- EXT1 External unit 1
- EXT2 External unit 2
- AUX1 AUX 1
- AUX2 AUX 2
- iPod iPod
- **Telephone** BT telephone
- BT AUDIO Bluetooth audio player
- OFF Turn the unit off
- When the source icon is not displayed, you can display it by touching the screen.

- While operating the menu, you cannot select a source by touching the source icon.
- To close source select menu, touch ESC.

## • When using the button, press SOURCE to select a source.

Press **SOURCE** repeatedly to switch between the following sources:

FM (FM tuner)—AM (AM tuner)—TV (television)—AV1 (AV 1 input)—AV2 (AV 2 input)—
DVD (built-in DVD player)—S-DVD (DVD player/multi-DVD player)—M-CD (multi-CD player)—iPod (iPod)—EXT1 (external unit 1)—EXT2 (external unit 2)—AUX1 (AUX 1)—AUX2 (AUX 2)—Telephone (Bluetooth telephone)—BT AUDIO (Bluetooth audio player)

## Notes

- In the following cases, the sound source will not change:
  - When there is no unit corresponding to the selected source connected to this unit.
  - When there is no disc in the unit.
  - When there is no disc in the DVD player.
  - When there is no magazine in the multi-CD player.
  - When the AUX (auxiliary input) is set to off (refer to page 109).
  - When the AV (AV input) is not set to VIDEO (refer to page 100).
- AUX1 is set to on by default. Turn off the AUX1 when not in use (refer to Switching the auxiliary setting on page 109).
- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit.

 When this unit's blue/white lead is connected to the vehicle's auto-antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off.

## Adjusting the volume

• Use VOLUME to adjust the sound level. With the head unit, rotate VOLUME to increase or decrease the volume. With the remote control, press VOLUME to increase or decrease the volume.

## **Turning the unit off**

- When using the touch panel keys, touch the source icon and then touch OFF.
- When the source icon is not displayed, you can display it by touching the screen.
- When using the button, press SOURCE and hold until the unit turns off. ■

## Using the rear display

You can watch the video sources (such as **DVD** or **AV**) on rear display independently of front display.

To watch a DVD/Video CD on the rear display only, switch the operation mode on the remote control to DVD. And you can operate the DVD/Video CD playback on the rear display independently by the remote control. (Refer to page 19.)



When you have turned the rear display output on by pressing **REAR ON**, you cannot turn it off even

if you press **SOURCE** and hold. In this case, press **REAR ON** and hold to turn the rear display output off

## • Press REAR ON to select the video source on the rear display.

Press **REAR ON** repeatedly to switch between the following video sources:

**F. SOURCE** (same source as the front display) —**DVD** (built-in DVD player)—**AV1** (AV 1 input)—**AV2** (AV 2 input)

Rear display output is turned on and the illumination color of **REAR ON** changes to a different color from the other buttons.

- You can also perform this operation by pressing **REAR SOURCE** on the remote control.
- To turn the rear display output off, press **REAR ON** and hold.
- When selecting F. SOURCE, when the selected source is an audio source, nothing is displayed on rear display.
- When you watch **DVD** (built-in DVD player) on both the front and the rear display, audio is not outputted from **REAR DISPLAY OUT**.
- When selecting **FRONT** in **REAR MODE**, you can select **F. SOURCE** only. And audio is not outputted from **REAR DISPLAY OUT**. (Refer to *Setting the video of rear display* on page 102.)



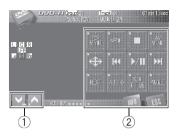
In the following cases, the sound source will not change:

- · When there is no disc in the unit.
- When the AV (AV input) is not set to VIDEO (refer to page 100).

## **Basic Operations**

## **Touch panel key basic** operation

## Activating the touch panel keys



## TILT (▼/♠) keys

Touch to adjust the LCD panel angle.

#### ② Touch panel keys

Touch to do various operations.

#### Touch the screen to activate the touch panel keys corresponding to each source.

The touch panel keys appear on the display.

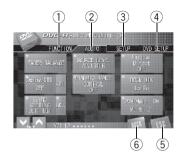
- To go to the next group of touch panel keys. touch NEXT.
- To return to the previous group of touch panel keys, touch PREV.

#### Touch ESC to hide the touch panel keys.



If you do not use the touch panel keys within 30 seconds, they will be hidden automatically when selecting video sources.

## **Operating the menu**



#### 1 FUNCTION key

Touch to select functions for each source.

#### ② AUDIO key

Touch to select various sound quality controls.

### ③ SETUP kev

Touch to select various setup functions.

#### **4** DVD SETUP key

Touch to select various DVD setup functions.

• **DVD SETUP** appears on the display only when DVD is played back on this unit.

#### ⑤ ESC key

Touch to cancel the control mode of functions.

#### 6 BACK key

Touch to return to the previous display.

#### **Touch AV MENU to display** AUDIO MENU.

**AUDIO MENU** appears on the display.

- When **AV MENU** is not displayed, you can display it by touching the screen.
- Touch the desired key to display the function names you want to operate.

3 Touch ESC to return to the display of each source.

## Operating the menu by using the joystick

You can also perform most of the menu items by using the joystick.

- You can perform the same operations by using the thumb pad on the remote control. In this case, switch the remote control operation mode to AVH. (Refer to page 19.)
- 1 Click the joystick during display of each source to display AUDIO MENU.
  AUDIO MENU appears on the display.
- 2 Move the joystick left or right to display the function names you want to operate.
- 3 Move the joystick to select the desired function.
- 4 Press BAND/ESC to return to the display of each source.
- You can return to the previous display by pressing **BACK**. ■

# Opening and closing the LCD panel

The LCD panel will be opened or closed automatically with the turning of the ignition switch on or off. You can turn off the automatic close/open function. (Refer to page 101.)

- The automatic close/open function will operate the display as follows.
  - When the ignition switch is turned OFF while the LCD panel is opened, the LCD panel will close after six seconds.

- When the ignition switch is turned ON again (or turned to ACC), the LCD panel will be opened automatically.
- Removing or attaching the front panel will automatically close or open the LCD panel. (Refer to the next page.)
- When the ignition switch is turned OFF after the LCD panel has been closed, turning the ignition switch ON again (or turning it to ACC) will not open the LCD panel. In this case, press OPEN/CLOSE to open the LCD panel.
- When closing the LCD panel, check to make sure that it has closed completely. If the LCD panel has stopped halfway, leaving it like this could result in damage.



### CAUTION

Keep hands and fingers clear of the unit when opening, closing, or adjusting the LCD panel. Be especially cautious of children's hands and fingers.

- Press OPEN/CLOSE to open the LCD panel.
- To close the LCD panel, press OPEN/CLOSE again.

## Adjusting the LCD panel angle



#### **Important**

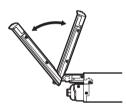
 If you can hear the LCD panel knocking against your vehicle's console or dashboard, touch TILT (▼) to move the LCD panel a little forward.

 When adjusting the LCD panel angle, be sure to touch TILT (►/♠). Forcibly adjusting the LCD panel by hand may damage it.



## ● Touch TILT (✔/♠) to adjust the LCD panel to an easily viewable angle.

The LCD panel angle continues changing as long as you touch **TILT** ( $\bigvee$ / $\land$ ) and hold.



 The adjusted LCD panel angle will be memorized and automatically returned to the next time the LCD panel is opened.

## Turning the LCD panel horizontal

When the LCD panel is upright and it hinders the operation of the air conditioner, the panel can be turned horizontal temporarily.

#### Press FLIP DOWN to turn the LCD panel horizontal.

- To return to original position, press **FLIP DOWN** again.
- The LCD panel returns to the original position automatically with beeping sound 10 seconds after operation. ■

# Protecting your unit from theft

The front panel can be detached from the head unit and stored in the provided protective case to prevent theft.

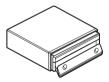
- If the front panel is not detached from the head unit within four seconds of turning off the ignition, a warning tone will sound.
- You can turn off the warning tone. See *Switching the warning tone* on page 108.
- You can turn off the security indicator. See Setting the security indicator on page 111.

## [ Important

- Never use force or grip the display and the buttons too tightly when removing or attaching.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.
- If removed, replace the front panel on the unit before starting up your vehicle.

## Removing the front panel

1 Press and hold EJECT to open the front panel.



## 2 Gently grip the right side of the front panel and slowly pull it outward.

Take care not to grip it too tightly or to drop the front panel and protect it from contact with water or other fluids to prevent permanent damage.



3 Put the front panel into provided protective case for safe keeping.

### Attaching the front panel

- Make sure the inner cover is closed.
- 2 Align the top of the front panel to the unit.



3 Press the bottom of the front panel until it is clicked.





In the following cases, remove the front panel and then attach it again:

- When nothing appears in the sub-display.
- When beep sounds.

# Built-in DVD player basic operations

## Playing a disc

- 1 Press EJECT to open the front panel. Disc loading slot appears.
- When a disc is loaded in this unit, touch the source icon and then touch **DVD** to select **DVD**.

## 2 Insert a disc into the disc loading slot.

Front panel is closed automatically, and playback will start.



Disc loading slot

- When **DVD DISC AUTO** is off, touch the source icon and then touch **DVD** to select the built-in DVD player (refer to page 21).
- If you are playing a DVD or Video CD, a menu may appear. Refer to *Operating the DVD menu* on page 34 and *PBC playback* on page 40.
- When the automatic playback function is on, this unit will cancel the DVD menu and automatically start playback from the first chapter of the first title. Refer to *Automatic playback of DVDs* on page 37.
- You can eject a disc by pressing EJECT.



- The DVD player plays one, standard, 12-cm or 8-cm (single) disc at a time. Do not use an adapter when playing 8-cm discs.
- Do not insert anything other than a disc into the disc loading slot. Discs which can be played back are listed on *Playable discs* on page 8.

- If bookmark function is on, DVD playback resumes from the selected point. For more details, refer to Resume playback (Bookmark) on page 35.
- If a disc contains a mixture of various media file types such as DivX and MP3, you can switch between media file types to play. Refer to Switching the media file type on this page.
- If you cannot insert a disc completely or if after you insert a disc the disc does not play, check that the label side of the disc is up.
   Press EJECT to eject the disc, and check the disc for damage before inserting it again.
- There is sometimes a delay between starting up disc playback and the sound being issued. When being read, FORMAT READ is displayed.
- When the disc loading or ejecting function does not operate properly, you can eject the disc by pressing and holding EJECT while opening the front panel.
- If an error message such as **ERROR-02** is displayed, refer to *Error messages* on page 119.

## **Basic playback controls**

The table below shows the basic controls for playing discs. The following chapters cover other playback features in more details.

Key	What it does
<b>▶</b> /II	Starts playback, pauses a disc that's playing or restarts a paused disc.
•	Stops playback.
<b> 44</b>	Skips to the start of the current track, chapter or file, then to previous tracks/chapters/files.  • Performs fast reverse by touching and holding I◄◄.
<b>&gt;&gt;</b>	Skips to the next track, chapter or file.  • Performs fast forward by touching and holding ••

## Motes

- You can also perform fast forward or reverse by pressing and holding ◀◀ or ▶▶ on the remote control.
- You may find with some DVD or Video CD discs that some playback controls do not work in certain parts of the disc. This is not a malfunction.

### Switching the media file type

When playing a disc containing a mixture of various media file types such as DivX and MP3, you can switch between media file types to play.

- This unit allows playback of the following media file type recorded on CD-R/RW/ROM discs.
  - Audio data (CD-DA)
  - Compressed audio files
  - DivX video files
  - JPEG picture files
- In case of DVD-R/RW/ROM, this unit does not allow playback of audio data (CD-DA) or JPEG picture files.

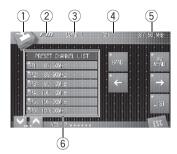
## • Touch MEDIA to switch between media file types.

Touch **MEDIA** repeatedly to switch between the following media file types:

**CD** (audio data (CD-DA))—**ROM-Audio** (compressed audio)—**DivX** (DivX video files)— **JPEG** (JPEG picture files)

#### **Tuner**

## Listening to the radio



These are the basic steps necessary to operate the radio. More advanced tuner operation is explained starting on the next page.

## [ Important

If you are using this unit in North, Central or South America, reset the AM tuning step (see Setting the AM tuning step on page 108).

#### 1 Source icon

Shows which source has been selected.

#### ② Source name

Shows the selected source name.

#### 3 Band indicator

Shows to which band the radio is tuned when FM is selected as the source.

#### (4) Preset number indicator

Shows which preset has been selected.

#### 5 Frequency indicator

Shows the frequency to which the tuner is tuned.

#### 6 Preset list display

Shows the preset list.

## 1 Touch the source icon and then touch FM or AM to select the tuner.

## 2 Touch BAND to select a band when FM is selected as the source.

Touch **BAND** repeatedly until the desired band is displayed, **BAND 1**, **BAND 2** or **BAND 3**.

## 3 To perform manual tuning, briefly touch ← or →.

The frequencies move up or down step by step.

You can also perform manual tuning by moving the joystick left or right.

## 4 To perform seek tuning, keep touching ← or → for about one second and release.

The tuner will scan the frequencies until a broadcast strong enough for good reception is found.

- You can cancel seek tuning by briefly touching either ← or →.
- If you keep touching ← or → you can skip stations. Seek tuning starts as soon as you release the key.
- You can also perform seek tuning by holding the joystick left or right. ■

# Storing and recalling broadcast frequencies

If you touch any of the preset tuning keys **P1** to **P6** you can easily store up to six broadcast frequencies for later recall with the touch of a key.

#### When you find a frequency that you want to store in memory keep touching one of preset tuning keys P1 to P6 until the beep sounds.

The selected radio station frequency has been stored in memory.

#### Tuner

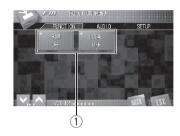
The next time you touch the same preset tuning key the radio station frequency is recalled from memory.

• When **P1** to **P6** are not displayed, you can display them by touching **LIST**.

## **Notes**

- Up to 18 FM stations, six for each of the three FM bands, and six AM stations can be stored in memory.
- You can also use ↑ and ↓ to recall radio station frequencies assigned to preset tuning keys P1 to P6 when P1 to P6 are not displayed.

# Introduction of advanced tuner operation



### 1 Function display

Shows the function names.

## 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

## 2 Touch ESC to return to the frequency display.

■ To return to the previous display, touch **BACK**. ■

## **Tuning in strong signals**

Local seek tuning lets you tune in only those radio stations with sufficiently strong signals for good reception.

## • Touch LOCAL on the function menu to set the sensitivity.

Touch **LOCAL** repeatedly until the desired level of sensitivity appears in the display.

There are four levels of sensitivity for FM and two levels for AM:

FM: OFF—LEVEL1—LEVEL2—LEVEL3—

LEVEL4

AM: OFF—LEVEL1—LEVEL2

#### **Tuner**

The **LEVEL4** setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

# Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under preset tuning keys **P1** to **P6** and once stored there you can tune in to those frequencies with the touch of a key.

## • Touch BSM on the function menu to turn BSM on.

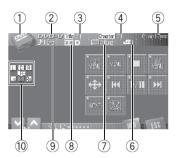
**BSM** begins to flash. While **BSM** is flashing the six strongest broadcast frequencies will be stored under preset tuning keys **P1** to **P6** in order of their signal strength. When finished, **BSM** stops flashing.

To cancel the storage process, touch BSM again.

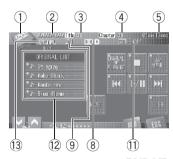


Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using **P1** to **P6**.

## **Watching a DVD**



**DVD** video



DVD-VR

These are the basic steps necessary to play a DVD with your DVD player. More advanced DVD operation is explained starting on page 38.

#### 1 Source icon

Shows which source has been selected.

#### ② DVD indicator

Shows the type of disc currently playing.

- **DVD-V** DVD video
- DVD-VR DVD-VR

#### 3 Title number indicator

Shows the title currently playing.

#### 4 Chapter number indicator

Shows the chapter currently playing.

#### **5** Play time indicator

Shows the elapsed playing time of the current chapter.

#### **6** Viewing angle indicator

Shows which viewing angle has been selected.

#### (7) Subtitle language indicator

Shows which subtitle language has been selected.

#### **8** Digital format indicator

Shows when a signal encoded in the corresponding format is detected.

#### 9 Audio language indicator

Shows which audio language has been selected.

For DVD-VR, only the number of the audio language is displayed.

#### Program format indicators

These change according to which channels are active in digital sources.

- L Left front channel
- C Center channel
- R Right front channel
- Ls Left surround channel
- **S** Surround channel (monaural)
- Rs Right surround channel
- **LFE** Low frequency effects channel

#### (1) Subtitle status indicator

Shows ON, OFF or nothing for the subtitle status.

#### 12 Title name list

Shows a list (**ORIGINAL LIST** or **PLAYLIST**) of title names.

### 13 Playing method indicator

Shows which playing method (ORIGINAL LIST or PLAYLIST) has been selected.

## 1 Touch the source icon and then touch DVD to select the DVD player.

- If no disc is loaded in the unit, you cannot select **DVD** (DVD player). Insert a disc in the unit. (Refer to page 26.)
- With some discs, a menu may be displayed. (Refer to *Operating the DVD menu* on page 34.)

## 2 Touch the screen to display the touch panel keys.

## 3 To skip back or forward to another chapter, touch |◀◀ or ▶►|.

Touching ►►I skips to the start of the next chapter. Touching I◄◄ once skips to the start of the current chapter. Touching it again will skip to the previous chapter.

• You can also skip back or forward to another chapter by moving the joystick left or right.

## 4 To perform fast forward or reverse, keep touching |◄◄ or ▶►|.

If you keep touching I◄◄ or ►►I for five seconds, the icon ◄◄ or ►► is highlighted. When this happens, fast reverse/fast forward continues even if you release I◄◄ or ►►I. To resume playback at a desired point, touch ►/II.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this happens, normal playback automatically resumes.

## Motes

 When playing DVD video, you can display the currently selected repeat range by touching INFO. For information about the operations of INFO when playing DVD-VR, refer to Displaying information of DVD-VR on this page.

- When playing DVD video, you can return to the manufacturer-set position on the disc by touching 4.
- If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

## Selecting titles from the title list

Title list lets you see the list of titles on a disc and select one of them to play back.

This function is available for DVD-VR.

## 1 Touch PREV or NEXT to switch between the lists of titles.

 When the list of titles is not displayed, touch LIST.

#### 2 Touch your favorite title.

That selection will begin to play.

# Displaying information of DVD-VR

Information of DVD-VR can be displayed.

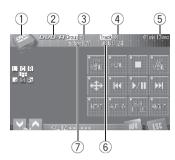
#### Touch INFO.

Touch **INFO** repeatedly to switch between the following settings:

Indicators—repeat range—**TitleName** (title name)

■ If specific information has not been recorded on a DVD-VR disc, **No xxxx** will be displayed (e.g., **No Title**). ■

## Listening to a DVD audio



These are the basic steps necessary to play a DVD audio with your DVD player. More advanced DVD audio operation is explained starting on page 38.

#### ① Source icon

Shows which source has been selected.

#### ② DVD-A indicator

Shows when a DVD audio is playing.

#### **③ Group number indicator**

Shows the group currently playing.

#### 4 Track number indicator

Shows the track number currently playing.

#### 5 Play time indicator

Shows the elapsed playing time of the current track.

## **6** Sampling frequency and number of quantization bits indicator

Shows the sampling frequency and number of quantization bits of the current track.

#### ⑦ Audio system indicator

Shows which audio system has been selected.

## 1 Touch the source icon and then touch DVD to select the DVD player.

- If no disc is loaded in the unit, you cannot select **DVD** (DVD player). Insert a disc in the unit. (Refer to page 26.)
- With some discs, a menu may be displayed.
   (Refer to Operating the DVD menu on the next page.)

## 2 Touch KEY to display the touch panel keys.

• When **KEY** is not displayed, you can display the touch panel keys by touching the screen.

## 3 To skip back or forward to another track, briefly touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching it again will skip to the previous track.

• You can also skip back or forward to another track by moving the joystick left or right.

## 4 To perform fast forward or reverse, keep touching |◄◄ or ▶►|.

If you keep touching I◄◄ or ►►I for five seconds, the icon ◄◄ or ►► is highlighted. When this happens, fast reverse/fast forward continues even if you release I◄◄ or ►►I. To resume playback at a desired point, touch

#### **►/II**.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this happens, normal playback automatically resumes.

## Motes

- You can display the repeat range selected currently by touching INFO.
- If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

## **Operating the DVD menu**

Some DVDs allow you to select from the disc contents using a menu.

- This function is available for DVD video and DVD audio.
- You can display the menu by touching
   MENU or TOP MENU while a disc is playing. Touching either of these keys again
   lets you start playback from the location selected from the menu. For details, refer to
   the instructions provided with the disc.

## Using DVD menu direct touch control

This function allows you to operate the DVD menu by touching the menu item directly.

## • Touch the desired menu item on the DVD menu directly.

• Depending on the contents of DVD discs, this function may not work properly. In this case, using touch panel keys operate the DVD menu.

## Using the touch panel keys

## 1 Touch to display touch panel keys to operate the DVD menu.

• When the touch panel keys are not displayed, you can display them by touching the screen.

## 2 Touch ∧, ∨, < or > to select the desired menu item.

#### 3 Touch ENTER.

Playback starts from the selected menu item.

- If you switch the remote control operation mode to **DVD**, the joystick on the remote control can also operate the DVD menu. (Refer to page 19.)
- You cannot operate the DVD menu from the joystick on the head unit.
- The way to display the menu differs depending on the disc. ■

## **Browsing still pictures**

You can browse still pictures recorded on the disc during DVD audio playback.

- You cannot operate Slideshow. (Refer to Slideshow on page 134.)
- 1 Touch BROWSE to browse still pictures during playback.

## 2 Touch PAGE – or PAGE + to switch still pictures.

Touching **PAGE** + goes to the next still picture.

Touching **PAGE** - returns to the previous still picture.

- To return to the initial still picture, touch **HOME**.
- If you switch the remote control operation mode to **DVD**, the thumb pad on the remote control can also browse still pictures. (Refer to page 19.)
- You cannot browse still pictures from the joystick on the head unit.

## Skipping back or forward to another title/group

## • To skip back or forward to another title/group, touch ↑ or ↓.

Touching ↑ skips to the start of the next title/ group. Touching ↓ skips to the start of the previous title/group.

Title/group numbers are displayed for eight seconds.

- You can also skip back or forward to another title/group by moving the joystick up or down.
- To switch between groups of touch panel keys, touch **NEXT** or **PREV.** (■)

## Selecting the play mode

You have two methods for playing DVD-VR disc; **ORIGINAL LIST** (original) and **PLAYLIST** (playlist).

- This function is available for DVD-VR.
- Titles created with DVD recorders are called original. Based on original, rearranged titles are called playlist. Playlists are created on DVD-R/RW discs.

## • Touch ORIGINAL PLAYLIST to switch the play mode.

If the play mode is changed, playback starts from the beginning of the selected play mode.

## Resume playback (Bookmark)

The Bookmark function lets you resume playback from a selected scene the next time the disc is loaded.

- This function is available for DVD video.
- During playback, touch BOOKMARK at the point you want to resume playback next time.

The selected scene will be bookmarked so that playback resumes from that point next time. You can bookmark up to five discs. After that, the oldest bookmark is replaced by the new one.

- To clear the bookmark on a disc, keep touching **BOOKMARK** during playback.
- If you switch the remote control operation mode to DVD, you can also bookmark a disc using BOOKMARK on the remote control. (Refer to page 19.)
- You can also bookmark a disc by pressing and holding **EJECT** on the remote control at the point you want to bookmark. Next time you load the disc, playback will resume from the bookmarked point. Note that you can only bookmark one disc using this method. To clear the bookmark on a disc, press **EJECT.** ■

## Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

#### 

Each time you touch  $\mathbf{I}$ , you move ahead one frame.

- To return to normal playback, touch ►/II.
- To switch between groups of touch panel keys, touch NEXT or PREV.
- With some discs, images may be unclear during frame-by-frame playback. ■

## Slow motion playback

This lets you slow down playback speed.

#### 

The icon is displayed, forward slow motion playback begins.

- You can adjust playback speed by pressing
   III or II► on the remote control during slow motion playback.
- To switch between groups of touch panel keys, touch NEXT or PREV.
- To return to normal playback, touch ►/II.



- There is no sound during slow motion playback.
- With some discs, images may be unclear during slow motion playback.
- Reverse slow motion playback is not possible.

# Searching for the part you want to play

You can use the search function to find the part you want to play.

For DVD video, you can select **TITLE** (title), **CHAPT** (chapter), **TIME** (time) or **10KEY** (numeric keypad).

For DVD-VR, you can select **TITLE** (title), **CHAPT** (chapter) or **TIME** (time). For DVD audio, you can select **GROUP** (group), **TRACK** (track) or **10KEY** (numeric keypad).

 Chapter search, track search and time search are not possible when disc playback has been stopped.

#### 1 Touch SEARCH/10key.

■ When playing DVD-VR, the key name is **SEARCH** instead of **SEARCH/10key**.

## 2 Touch the desired search option (e.g., CHAPT).

## 3 Touch 0 to 9 to input the desired number.

- To cancel the inputted numbers, touch **C**.
- You can also input the desired number by using the joystick and **0** to **9**.
- In the time search function, to select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch **7**, **1**, **0** and **0** in that order.

#### 4 Touch ENTER.

This starts playback from the selected part.



With discs featuring a menu, you can also touch **MENU** or **TOP MENU** and then make selections from the displayed menu.

# Changing audio language during playback (Multi-audio)

DVDs can provide audio playback with different languages and different systems (Dolby Digital, DTS etc.). With DVDs featuring multiaudio recordings, you can switch between languages/audio systems during playback.

#### • Touch AUDIO during playback.

Each time you touch **AUDIO** it switches between audio systems.



- With some DVDs, switching between languages/audio systems may only be possible using a menu display.
- You can also switch between languages/audio systems using **DVD SETUP MENU**. For details, refer to Setting the audio language on page 103.
- Display indications such as **Dolby D** and **Mch**indicate the audio system recorded on the
  DVD. Depending on the setting, playback may
  not be with the same audio system as that indicated.
- Touching AUDIO during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

## Changing the subtitle language during playback (Multi-subtitle)

With DVDs featuring multi-subtitle recordings, you can switch between subtitle languages during playback.

#### • Touch SUBTITLE during playback.

Each time you touch **SUBTITLE** it switches between subtitle languages.



- With some DVDs, switching between subtitle languages may only be possible using a menu display.
- You can also switch between subtitle languages using DVD SETUP MENU. For details, refer to Setting the subtitle language on page 103.

## **Playing DVD discs**

 Touching SUBTITLE during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

# Changing the viewing angle during playback (Multi-angle)

With DVDs featuring multi-angle (scenes shot from multiple angles) recordings, you can switch among viewing angles during playback.

- This function is available for DVD video and DVD audio.
- During playback of a scene shot from multiple angles, the angle icon is displayed. Turn angle icon display on or off using **DVD SETUP MENU**. For details, refer to Setting the angle icon display on page 104.
- Touch ANGLE during playback of a scene shot from multiple angles.

Each time you touch **ANGLE** it switches between angles.



Touching **ANGLE** during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

## **Automatic playback of DVDs**

When a DVD disc with DVD menu is inserted, this unit will cancel the DVD menu automatically and start playback from the first chapter of the first title.

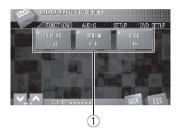
- This function is available for DVD video.
- Some DVDs may not operate properly. If this function is not fully operated, turn this function off and start playback.

# • Touch AUTO PLAY to turn automatic playback on.

- To turn automatic playback off, touch **AUTO PLAY** again.
- You can also turn automatic playback on or off by pressing AUTO PLAY button on the remote control.
- When the automatic playback is on, you cannot operate repeating play of DVD disc (refer to *Repeating play* on the next page). ■

## **Playing DVD discs**

# Introduction of advanced DVD operation



## Function display Shows the function names.

# 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

# 2 Touch ESC to return to the playback display.

■ To return to the previous display, touch **BACK**. ■

### Repeating play

There are three repeat play ranges for DVD playback.

### Touch REPEAT on the function menu to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

#### During DVD video and DVD-VR playback

- **DISC** Play through the current disc
- TITLE Repeat just the current title
- CHAPTER Repeat just the current chapter

#### During DVD audio playback

- **DISC** Play through the current disc
- GROUP Repeat just the current group
- TRACK Repeat just the current track

## Mote

If you perform chapter/track search or fast forward/reverse, the repeat play range changes to **DISC.** 

## Playing tracks in random order

Random play lets you play back tracks in a random order within the current group during DVD audio playback.

# • Touch RANDOM on the function menu to turn random play on.

Tracks will play in a random order within the current group.

■ To turn random play off, touch **RANDOM** again. ■

## Scanning tracks

Scan play lets you hear the first 10 seconds of each track in the current group during DVD audio playback.

# 1 Touch SCAN on the function menu to turn scan play on.

The first 10 seconds of each track of the current group is played.

# 2 When you find the desired track touch SCAN again.

■ After scanning is finished, normal playback of the tracks will begin again. ■

### Selecting audio output

When playing DVD video discs recorded with LPCM audio, you can switch the audio output.

• This function is not possible when disc playback has been stopped.

## **Playing DVD discs**

# • Touch L/R SELECT on the function menu to select the audio output.

Touch **L/R SELECT** repeatedly until the desired audio output appears in the display.

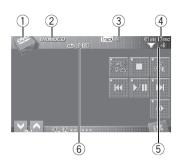
- L+R left and right
- LEFT left
- **RIGHT** right
- MIX mixing left and right

## **Note**

Depending on the disc and the playback location on the disc, the function may not be selectable, indicating that operating this function is not possible.

## **Playing Video CDs**

## **Watching a Video CD**



These are the basic steps necessary to play a Video CD with your DVD player. More advanced Video CD operation is explained starting on page 42.

#### 1 Source icon

Shows which source has been selected.

## ② VideoCD indicator

Shows when a Video CD is playing.

#### 3 Track number indicator

Shows the track number currently playing.

#### **4** Play time indicator

Shows the elapsed playing time of the current track.

#### ⑤ Audio output indicator

Shows the output channel selected currently.

#### 6 Repeat indicator

Shows the selected repeat range.

# 1 Touch the source icon and then touch DVD to select the DVD player.

- If no disc is loaded in the unit, you cannot select **DVD** (DVD player). Insert a disc in the unit. (Refer to page 26.)
- With a Video CD featuring the PBC (playback control) function, a menu is displayed. (Refer to *PBC playback* on this page.)

# 2 Touch the screen to display the touch panel keys.

# 3 To skip back or forward to another track, briefly touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching it again will skip to the previous track.

- You can also skip back or forward to another track by moving the joystick left or right.
- During PBC playback, a menu may be displayed if you perform these operations.

# 4 To perform fast forward or reverse, keep touching |◄◄ or ▶►|.

If you keep touching I◄◄ or ►►I for five seconds, the icon ◄◄ or ►► is highlighted. When this happens, fast reverse/fast forward continues even if you release I◄◄ or ►►I. To resume playback at a desired point, touch

#### **►/II**.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- Fast forward/fast reverse may not be possible at certain locations on some discs. If this happens, normal playback automatically resumes.



If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

## **PBC** playback

During playback of Video CDs featuring PBC (Playback Control), **PBC:ON** is displayed. You can operate PBC menu with **10KEY**.

# 1 When PBC menu is displayed, touch SEARCH/10key and then touch 10KEY.

 Depending on the discs, the menu may be two or more pages long. In such case, touch I◄◄ or ►►I to display the next or previous menu.

## **Playing Video CDs**

# 2 Touch 0 to 9 corresponding to a menu number and then touch ENTER to start playback.

Playback starts from the selected menu item.

#### 3 Touch ESC to hide the touch panel keys.



- You can display the menu by touching 4 during PBC playback. For details, refer to the instructions provided with the disc.
- PBC playback of Video CD cannot be cancelled.
- During playback of Video CDs featuring PBC (Playback Control), PBC:ON, search and time search functions cannot be used nor can you select the range for repeat play.

## Frame-by-frame playback

This lets you move ahead one frame at a time during playback.

#### 

Each time you touch •• , you move ahead one frame.

- To return to normal playback, touch ►/II.
- With some discs, images may be unclear during frame-by-frame playback. ■

## Slow motion playback

This lets you slow down playback speed.

# ● Keep touching **→** until **→** is displayed during playback.

The icon **▶** is displayed, forward slow motion playback begins.

- You can adjust playback speed by pressing
   III or II► on the remote control during slow motion playback.
- To return to normal playback, touch ►/II.

## Motes

- There is no sound during slow motion playback
- With some discs, images may be unclear during slow motion playback.
- Reverse slow motion playback is not possible.

# Searching for a desired scene, starting playback from a specified time

You can use the search function to search for a desired scene by specifying a track, and the time search function to specify the time on a disc at which play starts.

- During playback of Video CDs featuring PBC (playback control), this function cannot be operated.
- Time search is not possible when disc playback has been stopped.
- 1 Touch SEARCH/10key.
- 2 Touch TRACK (track), TIME (time) or 10KEY (numeric keypad).

# 3 Touch 0 to 9 to input the desired number.

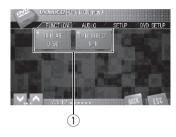
- To cancel the inputted numbers, touch **C**.
- You can also input the desired number by using the joystick and **0** to **9**.
- In the time search function, to select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch **7**, **1**, **0** and **0** in that order.

#### 4 Touch ENTER.

This starts playback from the selected scene.

### **Playing Video CDs**

# Introduction of advanced Video CD operation



### 1 Function display

Shows the function names.

# 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

# 2 Touch ESC to return to the playback display.

■ To return to the previous display, touch **BACK**. ■

## Repeating play

There are two repeat play ranges for the Video CD playback: **TRACK** (track repeat) and **DISC** (disc repeat).

- During playback of Video CDs featuring PBC (playback control), this function cannot be operated.
- Touch REPEAT on the function menu to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

- **DISC** Repeat the current disc
- TRACK Repeat just the current track



If you perform track search or fast forward/reverse, the repeat play range changes to **DISC**.

## **Selecting audio output**

You can switch between stereo and monaural audio output.

- This function is not possible when disc playback has been stopped.
- Touch L/R SELECT on the function menu to select the audio output.

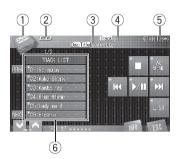
Touch **L/R SELECT** repeatedly until the desired audio output appears in the display.

- **L+R** left and right
- LEFT left
- RIGHT right
- MIX mixing left and right

**Playing CDs** 

## Listening to a CD

**Playing CDs** 



These are the basic steps necessary to play a CD with your DVD player, More advanced CD operation is explained starting on the next page.

#### Source icon

Shows which source has been selected.

#### 2 CD indicator

Shows when a CD is playing.

#### ③ Disc title indicator

Shows the title of the currently playing disc only when playing CD TEXT discs.

#### 4 Track number indicator

Shows the track number currently playing.

#### ⑤ Play time indicator

Shows the elapsed playing time of the current track.

#### 6 Track name list display

Shows the track name list.

### Touch the source icon and then touch DVD to select the DVD player.

• If no disc is loaded in the unit, you cannot select **DVD** (DVD player). Insert a disc in the unit. (Refer to page 26.)

### To skip back or forward to another track, briefly touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching ✓ once skips to the start of the current track. Touching it again will skip to the previous track.

 You can also skip back or forward to another. track by moving the joystick left or right.

### To perform fast forward or reverse, keep touching |◄◄ or ▶►|.

 You can also perform fast reverse/fast forward. by holding the joystick left or right.

## Selecting tracks from the track title list

Track title list lets you see the list of tracks on a disc and select one of them to play back. When playing a CD TEXT disc, track titles are displayed.

#### Touch PREV or NEXT to switch between the lists of titles.

 When the list of tracks is not displayed, touch LIST.

#### 2 Touch your favorite track title.

That selection will begin to play.

## **Displaying text information** on CD TEXT discs

Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title. track title, artist's name and playback time and are called CD TEXT discs. Text information recorded on a CD TEXT disc can be displayed.

## **Playing CDs**

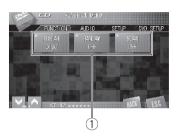
#### • Touch INFO.

Touch **INFO** repeatedly to switch between the following settings:

**Disc Title** (disc title)—**DiscArtist** (disc artist name)—**Track Title** (track title)—**TrackArtist** (track artist name)

■ If specific information has not been recorded on a CD TEXT disc, **No xxxx** will be displayed (e.g., **No Name**). ■

# Introduction of advanced CD operation



### 1 Function display

Shows the function names.

# 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

# 2 Touch ESC to return to the playback display.

■ To return to the previous display, touch **BACK**. ■

## Repeating play

There are two repeat play ranges for the CD playback: **TRACK** (track repeat) and **DISC** (disc repeat).

# • Touch REPEAT on the function menu to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

- DISC Repeat the current disc
- TRACK Repeat just the current track



If you perform track search or fast forward/reverse, the repeat play range changes to **DISC**.

## Playing tracks in random order

Random play lets you play back tracks on the CD in a random order.

 Touch RANDOM on the function menu to turn random play on.

Tracks will play in a random order.

■ To turn random play off, touch **RANDOM** again.

## Scanning tracks of a CD

Scan play lets you hear the first 10 seconds of each track on the CD.

Touch SCAN on the function menu to turn scan play on.

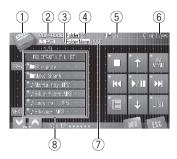
The first 10 seconds of each track is played.

- 2 When you find the desired track touch SCAN again.
- After scanning of a CD is finished, normal playback of the tracks will begin again.

(45

# Playing compressed audio

## Listening to compressed audio



These are the basic steps necessary to play a compressed audio with your DVD player. More advanced compressed audio operation is explained starting on page 48.

#### 1 Source icon

Shows which source has been selected.

#### ② ROM-Audio indicator

Shows when a compressed audio file is playing.

#### ③ MP3/WMA/AAC indicator

Shows the type of file currently playing.

#### **4** Folder number indicator

Shows the folder number currently playing.

#### (5) File number indicator

Shows the file number currently playing.

#### 6 Play time indicator

Shows the elapsed playing time of the current file.

#### (7) Folder name indicator

Shows the name of the currently playing folder.

#### 8 Folder and file name list

Shows the list of folder and file name.

# 1 Touch the source icon and then touch DVD to select the DVD player.

 If no disc is loaded in the unit, you cannot select **DVD** (DVD player). Insert a disc in the unit. (Refer to page 26.)

#### 2 Touch † or 1 to select a folder.

- You can also select a folder by moving the joystick up or down.
- To return to folder 01 (ROOT), press and hold BAND/ESC. However, if folder 01 (ROOT) contains no files, playback commences with folder 02.
- You cannot select a folder that does not have a compressed audio file recorded in it.

## 3 To skip back or forward to another track, briefly touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching it again will skip to the previous track.

 You can also skip back or forward to another track by moving the joystick left or right.

# 4 To perform fast forward or reverse, keep touching |◄◄ or ▶►|.

• You can also perform fast reverse/fast forward by holding the joystick left or right.

## **Motes**

- This DVD player can play back a compressed audio recorded on CD-R/RW/ROM and DVD-R/RW/ROM. (Refer to page 122 for files that can be played back.)
- Playback is carried out in order of file number.
   Folders are skipped if they contain no files. (If folder 01 (ROOT) contains no files, playback commences with folder 02.)
- When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
- There is no sound on fast forward or reverse.

# Playing compressed audio

# Selecting tracks from the file name list

File name list lets you see the list of file names (or folder names) and select one of them to playback.

## 1 Touch PREV or NEXT to switch between the lists of names.

• When the list of file names is not displayed, touch **LIST**.

# 2 Touch your favorite file name (or folder name).

That selection will begin to play.

- When you have selected a folder, a list of the names of the files (or the folders) in it can be viewed. Repeat steps 1 and 2 to select the desired file name.
- To return to the previous list (the folder one level higher), touch J. ■

# Displaying information on compressed audio

Information recorded on a compressed audio disc can be displayed.

#### 

- ALBUM (album title)
- TRACK (track title)
- FOLDER (folder name)
- FILE (file name)
- ARTIST (artist name)
- GENRE (genre)
- YEAR (year)
- When playing back WMA files, lists of album title, genre and year appear in blank.
- When playing back AAC files, lists of genre and year appear in blank.

- If specific information has not been recorded on a compressed audio file, **No xxxx** will be displayed in the list (e.g., **No Data**).
- Depending on the version of ID3 tag or
   Windows Media Player, the information may not be displayed correctly.

# Displaying text information on compressed audio

Text information recorded on a compressed audio can be displayed.

#### Touch INFO.

Touch **INFO** repeatedly to switch between the following settings:

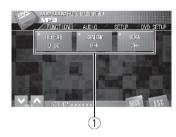
Folder Name (folder name)—File Name (file name)—Album (album title)—Track (track title)—Artist (artist name)

- If specific information has not been recorded on a compressed audio disc, No xxxx will be displayed (e.g., No Artist).
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed. ■

09

# Playing compressed audio

# Introduction of advanced built-in DVD player (compressed audio) operation



- Function display
   Shows the function names.
- 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

- 2 Touch ESC to return to the playback display.
- To return to the previous display, touch **BACK**. ■

## Repeating play

For compressed audio playback, there are three repeat play ranges: **FOLDER** (folder repeat), **FILE** (one-track repeat) and **DISC** (repeat all tracks).

# • Touch REPEAT on the function menu to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

- **DISC** Repeat all tracks
- FOLDER Repeat the current folder
- FILE Repeat just the current track



 If you select another folder during repeat play, the repeat play range changes to **DISC**.

- If you perform track search or fast forward/reverse during FILE, the repeat play range changes to FOLDER.
- When **FOLDER** is selected, it is not possible to play back a subfolder of that folder.

### Playing tracks in random order

Random play lets you play back tracks in a random order within the repeat range, **FOLDER** and **DISC**.

1 Select the repeat range.

Refer to Repeating play on this page.

# 2 Touch RANDOM on the function menu to turn random play on.

Tracks will play in a random order within the previously selected **FOLDER** or **DISC** ranges.

■ To turn random play off, touch **RANDOM** again. ■

## Scanning folders and tracks

While you are using **FOLDER**, the beginning of each track in the selected folder plays for about 10 seconds. When you are using **DISC**, the beginning of the first track of each folder is played for about 10 seconds.

1 Select the repeat range.

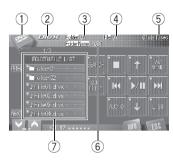
Refer to Repeating play on this page.

# 2 Touch SCAN on the function menu to turn scan play on.

The first 10 seconds of each track of the current folder (or the first track of each folder) is played.

- 3 When you find the desired track (or folder) touch SCAN again.
- After track or folder scanning is finished, normal playback of the tracks will begin again. ■

## Watching a DivX/JPEG



These are the basic steps necessary to play a DivX/JPEG with your DVD player. More advanced DivX/JPEG operation is explained starting on page 53.

#### 1 Source icon

Shows which source has been selected.

#### ② DivX/JPEG indicator

Shows the type of file currently playing.

#### ③ Folder number indicator

Shows the folder number currently playing.

#### 4 File number indicator

Shows the file number currently playing.

#### 5 Play time indicator

Shows the elapsed playing time of the current file.

 When playing a JPEG disc, play time indicator does not appear.

#### 6 Folder name indicator

Shows the name of the currently playing folder.

#### (7) Folder and file name list

Shows the list of folder and file name.

# 1 Touch the source icon and then touch DVD to select the DVD player.

 If no disc is loaded in the unit, you cannot select **DVD** (DVD player). Insert a disc in the unit. (Refer to page 26.)

# 2 Touch the screen to display the touch panel keys.

#### 3 Touch ↑ or ↓ to select a folder.

- You can also select a folder by moving the joystick up or down.
- To return to folder 01 (ROOT), press and hold BAND/ESC. However, if folder 01 (ROOT) contains no files, playback commences with folder 02.
- You cannot select a folder that does not have a DivX/JPFG file recorded in it.

## 4 To skip back or forward to another file, touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next file. Touching I◄◄ once skips to the start of the current file. Touching it again will skip to the previous file.

 You can also skip back or forward to another file by moving the joystick left or right.

# 5 To perform fast forward or reverse, keep touching I or ▶▶I.

If you keep touching I◄◄ or ►►I for five seconds, the icon ◄◄ or ►► is highlighted. When this happens, fast reverse/fast forward continues even if you release I◄◄ or ►►I. To resume playback at a desired point, touch

#### **►/II**.

- You can also perform fast reverse/fast forward by holding the joystick left or right.
- This is fast forward and reverse operation only for the file being played. This operation is canceled when the previous or next file is reached.
- When playing a JPEG disc, this operation cannot be performed.



- This DVD player can play back a DivX file recorded on CD-R/RW/ROM and DVD-R/RW/ ROM. (Refer to page 125 for files that can be played back.)
- This DVD player can play back a JPEG file recorded on CD-R/RW/ROM. (Refer to page 125 for files that can be played back.)
- Playback is carried out in order of file number.
   Folders are skipped if they contain no files. (If folder 01 (ROOT) contains no files, playback commences with folder 02.)
- · There is no sound on fast forward or reverse.
- If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

## Viewing a JPEG slideshow

When loading a CD/CD-R/RW containing JPEG picture files, this unit automatically starts a slideshow from the first folder/picture on the disc. The player displays the pictures in each folder in alphabetical order.

The table below shows the controls for viewing a slideshow

a siluesilow.	
Key	What it does
►/II	Starts the slideshow, pauses the slideshow or restarts a paused disc.
<b>◄</b> ◀	Displays the previous picture.
<b>&gt;&gt;</b>	Displays the next picture.
_	Rotates the displayed picture 90° clockwise.

## Playing DivX® VOD content

Some DivX VOD (video on demand) content may only be playable a fixed number of times.

When you load a disc containing this type of DivX VOD content, the remaining number of plays is shown on-screen and you then have the option of playing the disc (thereby using up one of the remaining plays), or stopping. If you load a disc that contains expired DivX VOD content (for example, content that has zero remaining plays), **Rental expired** is displayed.

If your DivX VOD content allows an unlimited number of plays, then you may load
the disc into your player and play the content as often as you like, and no message
will be displayed.

## [ Important

- In order to play DivX VOD content on this unit, you first need to register the unit with your DivX VOD content provider. About your registration code, refer to Displaying your DivX
   VOD registration code on page 106.
- DivX VOD content is protected by a DRM (Digital Rights Management) system. This restricts playback of content to specific, registered devices.
- If the message is displayed after loading a disc containing DivX VOD content, touch PLAY.

Playback of the DivX VOD content will start.

- To skip to the next file, touch NEXT PLAY.
- If you do not want to play the DivX VOD content, touch **STOP**. ■

# Selecting files from the file name list

File name list lets you see the list of file names (or folder names) and select one of them to playback.

# 1 Touch PREV or NEXT to switch between the lists of names.

• When the list of file names is not displayed, touch **LIST**.

# 2 Touch your favorite file name (or folder name).

That selection will begin to play.

- When you have selected a folder, a list of the names of the files (or the folders) in it can be viewed. Repeat steps 1 and 2 to select the desired file name.
- To return to the previous list (the folder one level higher), touch J. ■

# Displaying text information on DivX/JPEG disc

Text information recorded on a DivX/JPEG disc can be displayed.

#### Touch INFO.

Touch **INFO** repeatedly to switch between the following settings:

**Folder Name** (folder name)—**File Name** (file name) ■

## Frame-by-frame playback

This lets you move ahead one frame at a time during DivX playback.

# • Press II► on the remote control during playback.

Each time you press **II▶**, you move ahead one frame.

- To return to normal playback, touch ►/II.
- With some discs, images may be unclear during frame-by-frame playback. ■

## **Slow motion playback**

When playing DivX video file, this lets you slow down playback speed.

### 

The icon • is displayed, forward slow motion playback begins.

To return to normal playback, touch ►/II.

## **Motes**

- There is no sound during slow motion playback.
- With some discs, images may be unclear during slow motion playback.
- Reverse slow motion playback is not possible.

# Searching for the part you want to play

When playing DivX video file, you can use the time search function to find the part you want to play.

- Time search is not possible when disc playback has been stopped.
- Touch SEARCH.

## 2 Touch 0 to 9 to input the desired number.

- To cancel the inputted numbers, touch **C**.
- To select 1 hour 11 minutes, convert the time into 71 minutes 00 seconds and touch **7**, **1**, **0** and **0** in that order.
- You can also input the desired number by using the joystick and **0** to **9**.

#### 3 Touch ENTER.

This starts playback from the selected part.

# Changing audio language during playback (Multi-audio)

When playing a DivX video disc recorded with dialog in two or more languages, you can switch audio language during playback.

#### • Touch AUDIO during playback.

Each time you touch **AUDIO** it switches between audio systems.



Touching **AUDIO** during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

## Changing the subtitle language during playback (Multi-subtitle)

When playing a DivX video disc recorded with subtitles in one or more languages, you can switch subtitle language during playback.

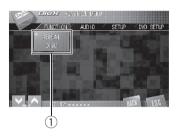
### • Touch SUBTITLE during playback.

Each time you touch **SUBTITLE** it switches between subtitle languages.



Touching **SUBTITLE** during fast forward/fast reverse, pause or slow motion playback returns you to normal playback.

# Introduction of advanced built-in DVD player (DivX/ JPEG) operation



- Function display
   Shows the function names.
- 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

- 2 Touch ESC to return to the playback display.
- $\blacksquare$  To return to the previous display, touch  $\mathbf{BACK}.$   $\blacksquare$

## Repeating play

For DivX video file playback, there are three repeat play ranges: **FOLDER** (folder repeat), **FILE** (file repeat) and **DISC** (repeat all files). For JPEG picture file playback, there are two repeat play ranges: **FOLDER** (folder repeat) and **DISC** (repeat all files).

# • Touch REPEAT on the function menu to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

- DISC Repeat all files
- **FOLDER** Repeat the current folder

• FILE - Repeat just the current file



- If you select another folder during repeat play, the repeat play range changes to DISC.
- If you perform track search or fast forward/reverse during FILE, the repeat play range changes to FOLDER.
- When FOLDER is selected, it is not possible to play back a subfolder of that folder.

## Playing files in random order

When playing a JPEG disc, random play lets you play back files in a random order within the repeat range, **FOLDER** and **DISC**.

1 Select the repeat range.

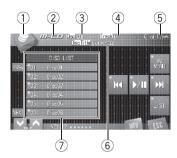
Refer to Repeating play on this page.

2 Touch RANDOM on the function menu to turn random play on.

Files will play in a random order within the previously selected **FOLDER** or **DISC** ranges.

■ To turn random play off, touch **RANDOM** again. ■

## **Listening to a CD**



You can use this unit to control a multi-CD player, which is sold separately.

These are the basic steps necessary to play a CD with your multi-CD player. More advanced CD operation is explained starting on page 56.

- This unit does not have a disc title input function.
- Only those functions described in this manual are supported by 50-disc multi-CD players.

#### 1 Source icon

Shows which source has been selected.

#### ② Source name

Shows the selected source name.

#### ③ Disc number indicator

Shows the disc number currently playing.

#### 4 Track number indicator

Shows the track number currently playing.

#### 5 Play time indicator

Shows the elapsed playing time of the current track.

#### ⑥ Disc title indicator

Shows the title of the currently playing disc only when playing CD TEXT discs.

## ⑦ Disc list display

Shows the disc list.

# 1 Touch the source icon and then touch M-CD to select the multi-CD player.

# 2 Touch any of 01 to 06 to select a disc you want to listen to.

If you want to select a disc located at 7 to 12, touch **PREV** or **NEXT** to display **07** to **12**.

- When **01** to **06** and **07** to **12** are not displayed, you can display them by touching **LIST**.
- You can also sequentially select a disc by using ↑/↓ when **DISC LIST** is not displayed.

# 3 To skip back or forward to another track, briefly touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching I◄¬ once skips to the start of the current track. Touching it again will skip to the previous track.

• You can also skip back or forward to another track by moving the joystick left or right.

# 4 To perform fast forward or reverse, keep touching |◄◄ or ▶►|.

• You can also perform fast reverse/fast forward by holding the joystick left or right.



- When the multi-CD player performs the preparatory operations, READY is displayed.
- If an error message such as ERROR-02 is displayed, refer to the multi-CD player owner's manual.
- If there are no discs in the multi-CD player magazine, NO DISC is displayed.

## **Pausing CD playback**

Pause lets you temporarily stop disc playback.

#### Touch ►/II to turn pause on.

Playback of the current track pauses.

To turn pause off, touch ►/II again.

## Selecting tracks from the track title list

Track title list lets you see the list of tracks on a disc and select one of them to play back. When playing a CD TEXT disc, track titles are displayed.

#### Touch LIST to display track list.

Each time you touch **LIST** it selects lists in the following order:

**DISC LIST** (disc list)—**TRACK LIST** (track list) -no list displays

#### Touch PREV or NEXT to switch between the lists of titles.

#### Touch your favorite track title.

That selection will begin to play.

## **Displaying text information** on CD TEXT discs

You can use these functions only with a CD TEXT compatible multi-CD player. Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist's name and playback time

and are called CD TEXT discs. Text information recorded on a CD TEXT disc can be displayed.

#### Touch INFO.

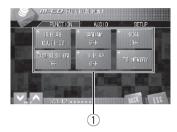
Touch **INFO** repeatedly to switch between the following settings:

Disc Title (disc title)—DiscArtist (disc artist name)—Track Title (track title)—TrackArtist (track artist name)

 If specific information has not been recorded on a CD TEXT disc. No xxxx will be displayed (e.g., No Name).

Multi-CD Player

# Introduction of advanced multi-CD player operation



### Function display

Shows the function names.

# 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

# 2 Touch ESC to return to the playback display.

■ To return to the previous display, touch **BACK**. ■

## **Repeating play**

There are three repeat play ranges for the multi-CD player: **MULTI-CD** (multi-CD player repeat), **TRACK** (one-track repeat) and **DISC** (disc repeat).

# • Touch REPEAT on the function menu to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

- MULTI-CD Repeat all discs in the multi-CD player
- TRACK Repeat just the current track
- DISC Repeat the current disc

## Motes

- If you select other discs during repeat play, the repeat play range changes to MULTI-CD.
- If you perform track search or fast forward/reverse during TRACK, the repeat play range changes to DISC.

## Playing tracks in random order

Random play lets you play back tracks in random order within the repeat range, **MULTI-CD** and **DISC**.

#### 1 Select the repeat range.

Refer to Repeating play on this page.

# 2 Touch RANDOM on the function menu to turn random play on.

Tracks will play in a random order within the previously selected **MULTI-CD** or **DISC** ranges.

■ To turn random play off, touch **RANDOM** again. ■

## **Scanning CDs and tracks**

While you are using **DISC**, the beginning of each track on the selected disc plays for about 10 seconds. When you are using **MULTI-CD**, the beginning of the first track of each disc is played for about 10 seconds.

#### 1 Select the repeat range.

Refer to Repeating play on this page.

# 2 Touch SCAN on the function menu to turn scan play on.

The first 10 seconds of each track of the current disc (or the first track of each disc) is played.

## **Multi-CD Player**

# 3 When you find the desired track (or disc) touch SCAN again.

■ After track or disc scanning is finished, normal playback of the tracks will begin again. ■

# Using compression and bass emphasis

You can use these functions only with a multi-CD player that supports them.

Using COMP (compression) and DBE (dynamic bass emphasis) functions lets you adjust the sound playback quality of the multi-CD player.

# • Touch COMPRESSION on the function menu to select your favorite setting.

Touch **COMPRESSION** repeatedly to switch between the following settings:

## OFF—COMP1—COMP2—OFF—DBE1—DBE2

■ If the multi-CD player does not support COMP/DBE, **NO COMP** is displayed and **COMPRESSION** cannot be operated. ■

## **Using ITS playlists**

ITS (instant track selection) lets you make a playlist of favorite tracks from those in the multi-CD player magazine. After you have added your favorite tracks to the playlist you can turn on ITS play and play just those selections.

# Creating a playlist with ITS programming

You can use ITS to enter and play back up to 99 tracks per disc from up to 100 discs (with the disc titles). (With multi-CD players sold be-

fore the CDX-P1250 and CDX-P650, up to 24 tracks can be stored in the playlist.)

- 1 Play a CD that you want to program.
- 2 Touch ITS MEMORY on the function menu.

# 4 Touch MEMORY to store the currently playing track in the playlist.

**MEMORY** is displayed briefly and the currently playing selection is added to your playlist. The display then shows track number again.

 After data for 100 discs has been stored in memory, data for a new disc will overwrite the oldest one.

### Playback from your ITS playlist

ITS play lets you listen to the tracks that you have entered into your ITS playlist. When you turn on ITS play, tracks from your ITS playlist in the multi-CD player will begin to play.

#### Select the repeat range.

Refer to Repeating play on the previous page.

# 2 Touch ITS PLAY on the function menu to turn ITS play on.

Playback begins of those tracks from your playlist within the previously selected **MULTI-CD** or **DISC** ranges.

- If no tracks in the current range are programmed for ITS play, then ITS EMPTY is displayed.
- To turn ITS play off, touch ITS PLAY again.

# Erasing a track from your ITS playlist

You can delete a track from your ITS playlist if ITS play is on.

If ITS play is already on, skip to step 2.

# 1 Play the CD with the track you want to delete from your ITS playlist, and turn ITS play on.

Refer to *Playback from your ITS playlist* on the previous page.

- 2 Touch ITS MEMORY on the function menu.
- 3 Touch **<** or **>** to select the desired track.
- 4 Touch CLEAR to erase the track from your ITS playlist.

The currently playing selection is erased from your ITS playlist and playback of the next track from your ITS playlist begins.

 If there are no tracks from your playlist in the current range, ITS EMPTY is displayed and normal play resumes.

### **Erasing a CD from your ITS playlist**

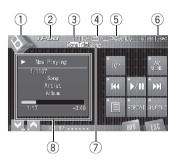
You can delete all tracks of a CD from your ITS playlist if ITS play is off.

- 1 Play the CD that you want to delete.
- 2 Touch ITS MEMORY on the function menu.
- 3 Touch CLEAR to erase all tracks on the currently playing CD from your ITS playlist.

All tracks on the currently playing CD are erased from your playlist and **CLEAR** is displayed.

## Playing songs on iPod

# Listening to songs on your iPod



You can use this unit to control an interface adapter for iPod, which is sold separately.

#### 1 Source icon

Shows which source has been selected.

#### ② Source name

Shows the selected source name.

#### **3** Song number indicator

Shows the number of song played in the selected list.

#### 4 Repeat indicator

Shows when repeat range is selected to current track.

#### (5) Shuffle indicator

Shows when random play is set to **SONGS** or **ALBUMS**.

#### 6 Play time indicator

Shows the elapsed playing time of the current song.

#### Song title indicator

Shows the title of the currently playing song.

#### 8 Song information

Shows detailed information of currently playing song.

## 1 Touch the source icon and then touch iPod to select the iPod

 When the iPod is not connected to this unit, you cannot select the iPod as a source.

# 2 To skip back or forward to another song, touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next song. Touching I◄◄ once skips to the start of the current song. Touching it again will skip to the previous song.

# 3 To perform fast forward or reverse, keep touching I◄◀ or ▶►I. ■

## **Browsing for a song**

The operation of this unit to control an iPod is designed to be as close to the operation of the iPod as possible for easy operation and song search.

- 1 Touch TOP to display the top menu.
- 2 Touch one of the categories in which you want to search for a song.
  - Playlists (playlists)
  - Artists (artists)
  - Albums (albums)
  - Songs (songs)
  - Genres (genres)

### 3 Touch a list title that you want to play.

Repeat this operation until you find the desired song.

- You can start playback throughout the selected list by touching and holding desired list title.
- You can start a playback of all the songs in the selected list (Genres, Artists or Albums). To do this, touch ALL.

## Playing songs on iPod

- To go to the next group of list titles, touch **NEXT**.
- To return to the previous group of list titles, touch **PREV**.
- To return to the previous menu, touch ←.
- To go to the top menu of the list search, touch **TOP**.
- If the playback stops for any reason, touch **TOP** and refine your search for a song. ■

### Pausing a song

Pause lets you temporarily stop playback of a song.

#### Touch ►/II during playback.

**PAUSE** appears in the display.

■ To resume playback at the same point that you turned pause on, touch ►/II again. ■

# Displaying text information on iPod

Text information recorded on the iPod can be displayed on the information bar.

#### Touch INFO.

Touch **INFO** repeatedly to switch between the following settings:

**Song Title** (song title)—**Artist** (artist name)—**Album** (album title)

 If the characters recorded on the iPod are not compatible with this unit, those characters will not be displayed.

# Displaying information on song

Song title, artist name, album title of the currently playing song can be displayed (if they have been entered in iPod) together with the index and the remaining playback time in the form of the status bar.

# Touch ■ to display information on the song you are currently playing.

Song information is displayed.

 Status bar shows the remaining playback time. The bar is filled up from the left to the right as the playback time is consumed.

### Repeating play

For playback of the songs on the iPod, there are two repeat play ranges: **ONE** (repeat one song) and **ALL** (repeat all songs in the list).

 While this unit is set to repeat one song, you cannot select the other songs.

#### Touch REPEAT to select the repeat range.

Touch **REPEAT** repeatedly until the desired repeat range appears in the display.

- **ONE** Repeat just the current song
- ALL Repeat all songs in the selected list

# Playing songs in a random order (shuffle)

For playback of the songs on the iPod, there are two random play methods: **SONGS** (play back songs in a random order) and **ALBUMS** (play back albums in a random order).

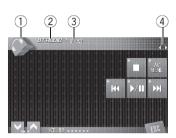
# • Touch SHUFFLE to select the random play method.

Touch **SHUFFLE** repeatedly until the desired random play method appears in the display.

- SONGS Play back songs in a random order within the selected list
- ALBUMS Select an album randomly, and then play back all the songs in it in order
- To cancel the random play, touch **SHUFFLE** repeatedly until the shuffle icon is turned off. ■

### **Bluetooth Audio**

# Listening to songs on BT Audio (Bluetooth audio player)



If you connect Bluetooth adapter (e.g. CD-BTB100) to this unit, you can control Bluetooth audio player via Bluetooth wireless technology.

 In some countries, CD-BTB100 is not sold on the market.

For details concerning operation, refer to the Bluetooth adapter's operation manual. This section provides brief information on Bluetooth audio player operations with this unit which slightly differes or is cut short from that described in the Bluetooth adapter's operation manual.

Even though your audio player does not contain a Bluetooth module, you can still control it from this unit via Bluetooth wireless technology. To control your audio player by using this unit, connect a product featuring Bluetooth wireless technology (available on the market) to your audio player and connect Bluetooth adapter (e.g. CD-BTB100) to this unit.

## [ Important

- Depending on the Bluetooth audio player connected to this unit, the available operations with this unit are limited to the following two levels:
  - Lower level: Only playing back songs on your audio player is possible.

- Higher level: Playing back, pausing, selecting songs, etc., are possible (all the operations illustrated in this manual).
- Since there are a number of Bluetooth audio players available on the market, operations with your Bluetooth audio player using this unit vary in great range. Please refer to the instruction manual that came with your Bluetooth audio player as well as this manual while operating your player on this unit.
- Information about songs (e.g. the elapsed playing time, song title, song index, etc.) cannot be displayed on this unit.
- While you are listening to songs on your Bluetooth audio player, please refrain from operating on your cellular phone as much as possible. If you try operating on your cellular phone, the signal from your cellular phone may cause a noise on the song playback.
- When you are talking on the cellular phone connected to this unit via Bluetooth wireless technology, the song playback from your Bluetooth audio player connected to this unit is muted.
- Even if while you are listening to song on your Bluetooth audio player you switch to another source, the playback of song continues to elapse.

#### 1 Source icon

Shows which source has been selected.

#### 2 Source name

Shows the selected source name.

#### ③ Device name

Shows the device name of the connected Bluetooth audio player (or Bluetooth adapter).

#### 4 Bluetooth audio indicator

Shows when a Bluetooth audio player connection is established (for more details, refer to *Connecting a Bluetooth audio player* on the next page).

### **Bluetooth Audio**

# 1 Touch the source icon and then touch BT AUDIO to select the Bluetooth audio source.

• For this unit to control your Bluetooth audio player it needs to establish a Bluetooth wireless connection. (Refer to *Connecting a Bluetooth audio player* on this page.)

#### 2 Touch ►/II.

Playback starts.

■ When you want to pause a song, touch ►/II again.

## 3 To skip back or forward to another track, briefly touch |◄◄ or ▶►|.

Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching it again will skip to the previous track.

• You can also skip back or forward to another track by moving the joystick left or right.

# 4 To perform fast forward or reverse, keep touching I◄◀ or ▶►I.

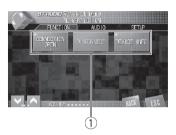
• You can also perform fast reverse/fast forward by holding the joystick left or right.

### 5 To stop playback, touch ■.



Depending on the Bluetooth audio player you connected to this unit, operations on this unit to control the player may differ from those explained in this manual.

# Introduction of advanced BT Audio operation



## Function display Shows the function names.

1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

- 2 Touch ESC to return to the playback display.
- To return to the previous display, touch **BACK**. ■

# Connecting a Bluetooth audio player

• Touch CONNECTION OPEN on the function menu to turn the connection open on. CONNECTION WAITING is displayed. This unit is now on standby for connection from Bluetooth audio player.

If your Bluetooth audio player is set ready for Bluetooth wireless connection, connection to this unit will be automatically established.

### **Bluetooth Audio**



Before you can use audio players you may need to enter the PIN code into this unit. If your player requires a PIN code to establish a connection, look for the code on the player or in its accompanying documentation. Enter the PIN code referring to Entering PIN code for Bluetooth wireless connection on page 111.

# Disconnecting a Bluetooth audio player

• Touch DISCONNECT on the function menu.

After the disconnection is completed, **No Connection** is displayed. ■

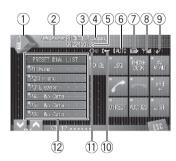
# Displaying BD (Bluetooth Device) address

• Touch DEVICE INFO on the function menu to display the BD address.

Various information regarding the Bluetooth wireless technology are displayed.

- BD ADDRESS (system address)
- SYSTEM NAME (system name)
- SYSTEM VER. (version)
- **BT MODULE VER.** (Bluetooth module version)

# Hands-free phoning with cellular phones featuring Bluetooth wireless technology



If you use Bluetooth adapter (e.g. CD-BTB100), you can connect a cellular phone featuring Bluetooth wireless technology to this unit for hands-free, wireless calls, even while driving.

 In some countries, CD-BTB100 is not sold on the market.

For details concerning operation, refer to the Bluetooth adapter's operation manual. This section provides brief information on the hands-free phoning operations with this unit which slightly differes or is cut short from that described in the Bluetooth adapter's operation manual.



Since this unit is on standby to connect with your cellular phones via Bluetooth wireless technology, using this unit without running the engine can result in battery drainage.

#### 1 Source icon

Shows which source has been selected.

#### ② Source name

Shows the selected source name.

#### **3** User number indicator

Shows the registration number of the cellular phone.

#### 4 Device name

Shows the device name of the cellular phone.

#### 5 Phone number

Shows the phone number you selected.

# Automatic answering/Automatic rejecting indicator

Shows when the automatic answering function is on (for more details, refer to *Setting the automatic answering* on page 72). Shows when the automatic rejecting function is on (for more details, refer to *Setting the automatic rejecting* on page 72).

#### ⑦ Battery strength indicator

Shows the battery strength of cellular phone.

- Battery strength indicator may differ from the actual battery strength.
- If the battery strength is not available, nothing is displayed in the battery strength indicator area.

### **8** Signal level indicator

Shows the signal strength of cellular phone.

- Signal level indicator may differ from the actual signal level.
- Depending on the cellular phones featuring Bluetooth wireless technology, radio field intensity is not available.

#### 9 Telephone indicator

Shows when a phone connection using Bluetooth wireless technology is established (for more details, refer to *Connecting a cellular phone* on page 66).

• While connecting automatically, telephone indicator is flashing.

#### **10** Incoming call notice indication

Shows when an incoming call has been received and not checked yet.

 Incoming call notice is not displayed for calls made when your cellular phone is disconnected from this unit.

#### (1) Voice recognition indicator

Shows when the voice recognition function is on (for more details, refer to *Voice recognition* on the next page).

## Preset dial list display

Shows the Preset dial list.

• Touch the source icon and then touch Telephone to select the telephone.



- The fader/balance setting (refer to Using balance adjustment on page 82) for the phone source is set to FRONT 25 by default.
- Equalizer curve for the phone source is fixed. When selecting the phone source, you cannot operate the equalizer function. Refer to *Recalling equalizer curves* on page 88.

# Setting up for hands-free phoning

Before you can use the hands-free phoning function you will need to set up the unit for use with your cellular phone. This entails establishing a Bluetooth wireless connection between this unit and your phone, registering your phone with this unit, and adjusting the volume level.

#### 1 Connection

For detailed instructions on connecting your phone to this unit via Bluetooth wireless tech-

nology, refer to *Connecting a cellular phone* on the next page.

• Your phone should now be temporarily connected; however, to make best use of the technology, we recommend you register the phone to this unit.

#### 2 Registration

To register your temporarily connected phone, refer to *Registering connected cellular phone* on page 67.

#### 3 Volume adjustment

Adjust the earpiece volume on your cellular phone for comfort. When adjusted, the volume level is memorized in this unit as the default setting.

- Caller's voice volume and ring volume may vary depending on the type of cellular phones.
- If the difference between the ring volume and caller's voice volume is big, overall volume level may become unstable.
- Before disconnecting cellular phone from this unit, make sure to adjust the volume to proper level. If the volume has been muted (zero level) on your cellular phone, the volume level of your cellular phone remains muted even after the cellular phone is disconnected from this unit. ■

## Basic operation of handsfree phoning



Advanced operations that require your attention such as dialing numbers on the monitor, using phone book, etc., are prohibited while you are driving. When you need to use these advanced operations, stop your vehicle in a safe place and operate.

## Making a phone call Voice recognition

## 1 Touch VOICE to turn the voice recognition function on.

Voice dial icon appears on the information bar. Voice recognition function is now ready.

- To cancel the voice recognition function, touch **VOICE** again.
- 2 Pronounce the name of your contact.

# Taking a phone call Answering an incoming call

1 When a call comes in, touch ✓.

Touching ✓ switches between callers on hold.

#### 2 To end the call, touch -.

The estimated call time appears in the display (this may differ slightly from the actual call time).

### Rejecting an incoming call

• When a call comes in, touch -. The call is rejected.

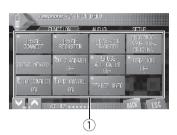
### **Answering a call waiting**

- 1 Touch 'to answer a call waiting.
- 2 Touch at to end all calls.
- The caller you have been talking to is now on hold. To end the call, both you and your caller need to hang up the phone.
- While your callers hold the line, touching 
   switches between callers.

### Rejecting a call waiting

● Touch - to reject a call waiting. ■

# Introduction of advanced hands-free phoning operation



### 1 Function display

Shows the function names

# 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

# 2 Touch ESC to return to the telephone standby display.

■ To return to the previous display, touch **BACK**. ■

## Connecting a cellular phone Searching for available cellular phones

1 Touch PHONE CONNECT on the function menu.

# 2 Touch SEARCH to search for available cellular phones.

While searching, **SEARCHING** flashes. When available cellular phones featuring Bluetooth wireless technology are found, device names or **Name Not Found** (if names cannot be obtained) are displayed.

• If this unit fails to find any available cellular phones, **Not Found** is displayed.

## 3 Touch the device name you want to connect.

While connecting, **CONNECTING** flashes. To complete the connection, please check the device name (**Pioneer BT unit**) and enter the link code on your cellular phone. If the connection is established. **CONNECTED** is displayed.

■ The link code is set to **0000** as default. You can change this code in the initial setting. Refer to *Entering PIN code for Bluetooth wireless connection* on page 111.

# Using a cellular phone to initiate a connection

1 Touch PHONE CONNECT on the function menu.

#### 2 Touch CONNECTION OPEN.

The unit is now on standby for connection from cellular phone.

# 3 Use cellular phone to connect to this unit.

To cancel this function, touch

#### **CONNECTION OPEN** again.

■ The link code is set to **0000** as default. You can change this code in the initial setting. Refer to Entering PIN code for Bluetooth wireless connection on page 111. ■

## Disconnecting a cellular phone

1 Touch PHONE CONNECT on the function menu.

# 2 Touch DISCONNECT to disconnect the currently connected cellular phone from this unit.

After the disconnection is completed, **No Connection** is displayed. ■

# Registering connected cellular phone

1 Touch PHONE REGISTER on the function menu.

Registration assignments appear on the display. From the top to the third assignment are for User phone 1, 2 and 3. The rest two assignments are for Guest phone 1 and 2.

# 2 Touch and hold one of the registration assignments to register the currenctly connected phone.

If the registration is succeeded, the device name of the connected phone is displayed in the selected assignment.

- If the assignment is empty, the device name is not displayed. If the assignment is already taken, the device name appears. To replace an assignment with a new phone, first delete the current assignment. For more detailed instructions, see Deleting a registered phone on this page.
- If the registration failed, device name of the connected phone is not displayed in the selected assignment. In this case, return to step 1 and try again. ■

## **Deleting a registered phone**

1 Touch PHONE REGISTER on the function menu.

# 2 Touch DELETE next to the device name you want to delete.

A confirmation display appears. Touch **YES** to delete the phone.

 $\blacksquare$  To cancel deleting a registered phone, touch  $\mathbf{NO}.$   $\blacksquare$ 

# Connecting to a registered cellular phone

# Connecting to a registered phone manually

- 1 Touch PHONE CONNECT on the function menu.
- 2 Touch DIRECT CONNECT.
- 3 Touch the device name you want to connect.

While connecting, **CONNECTING** is flashing. If the connection is established, **CONNECTED** is displayed.

# Connecting to a registered phone automatically

 Touch AUTO CONNECT on the function menu to turn the Automatic Connection function on.

If your cellular phone is set ready for Bluetooth wireless connection, the connection to this unit will be automatically established.

■ To turn automatic connection off, touch **AUTO CONNECT** again. ■

# Using the Phone Book Transferring entries to the Phone Book

The Phone Book can hold a total of 500 entries; 300 from User 1, 150 from User 2, and 50 from User 3.

- 1 Touch PHONEBOOK TRANSFER on the function menu.
- 2 Touch START to turn the Phone Book Transfer function on.

The Phone Book Transfer is now on standby.

## 3 Use cellular phone to perform phone book transfer.

Perform phone book transfer using the cellular phone. For detailed instruction on this, refer to the instruction manual that came with your cellular phone.

- The display indicates how many entries have been transferred and the total number to be transferred.
- To cancel the transferring process, touch **STOP**.
- 4 Completed is displayed and phone book transfer is completed.

# Changing the Phone Book display order

 Touch PHONEBOOK NAME VIEW on the function menu to turn Phone Book Name View function on.

Display order for the Phone Book is changed.

■ To change to the other display order, touch **PHONEBOOK NAME VIEW** again.

# Calling a number in the Phone Book



To perform this operation, be sure to park your vehicle and apply the parking brake.

After finding the number in the Phone Book you want to call, you can select the entry and make the call.

- 1 Touch PHONEBOOK to display the Phone Book.
- 2 Touch SEARCH to display the Phone Book search display.
- 3 Touch an alphabet letter to select the first letter of the name you are looking for.
- 4 Touch ENTER to show entries starting with the letter you chose.

The display shows the first six Phone Book entries starting with that letter (e.g. "Ben", "Brian" and "Burt" when "B" is selected).

# 5 Touch a Phone Book entry you want to call.

The display is switched to the Phone Book detail display.

- Touch **PREV** or **NEXT** to display other phone book entries.
- To refine the search with a different letter, touch •

# 6 Touch phone number of the Phone Book entry you want to call.

If several phone numbers are entered to an entry, touch one you want to call.

The display returns to the normal display and the Phone Book entry you selected is displayed on the information bar.

#### 7 Touch to make a call.

- For an international call, touch add "+" to add
- + to the phone number.

#### 8 To end the call, touch -.

The estimated call time appears in the display (this may differ slightly from the actual call time).

# Editing the name of a Phone Book entry



To perform this operation, be sure to park your vehicle and apply the parking brake.

## 1 Touch PHONEBOOK to display the Phone Book.

# 2 Select a Phone Book entry you want to edit.

Refer to *Calling a number in the Phone Book* on this page for detailed instructions.

# 3 Touch EDIT next to the Phone Book entry name.

The display is changed to the Phone Book edit display.

#### 4 Touch the letter you wish to input.

Key	What it does
<	Moves the cursor to the previous character position.
>	Moves the cursor to the next character position.
ш	Inputs the space.
ABC/123	Switches keypad between alphabet and numeric.
ಠ	Deletes letter by letter from the end of the text.

## 5 Touch MEMORY to store the new name.

### **Editing phone numbers**



### Martant ( )

To perform this operation, be sure to park your vehicle and apply the parking brake.

## 1 Touch PHONEBOOK to display the Phone Book.

# 2 Select a Phone Book entry you want to edit.

See step two to four on *Calling a number in the Phone Book* on the previous page for how to do this.

# 3 Touch EDIT next to the phone number you want to edit.

The display is changed to the Phone Book dial edit display.

#### 4 Touch 0 to 9 to input numbers.

- For an international call, touch add "+" to add
- + to the phone number.
- Touch **CLEAR** to delete the number. Touch and hold **CLEAR** to delete all the input numbers.

# 5 Touch MEMORY to store the new number.

### **Clearing a Phone Book entry**



#### Important

To perform this operation, be sure to park your vehicle and apply the parking brake.

## 1 Touch PHONEBOOK to display the Phone Book.

# 2 Select a Phone Book entry you want to delete.

See step two to four on *Calling a number in the Phone Book* on the previous page for how to do this.

# 3 Touch DELETE to delete the Phone Book entry.

A confirmation display appears. Touch **YES** to delete the entry.

■ If you do not want to clear a Phone Book entry that you have selected, touch **NO**. ■

## **Using the Call History**



#### **Important**

To perform this operation, be sure to park your vehicle and apply the parking brake.

The 12 most recent calls made (dialled), received and missed, are stored in the Call History. You can browse the Call History and call numbers from it.

#### 1 Touch LOG to display the Call History.

Touching **LOG** repeatedly switches between the following call histories:

MISSED CALL LIST (missed call)— DIALED CALL LIST (dialled call)— RECEIVED CALL LIST (received call)

- If no phone numbers have been stored in the selected list, nothing is displayed.
- You can switch between phone number and name (if entered) by touching **ABC/123**.

# 2 Touch a phone number or name (if entered) you want to call.

The display returns to the normal display and the phone number you selected is displayed on the information bar.

• Touch **PREV** or **NEXT** to display other phone number or name (if entered).

#### 3 Touch \( \bigce \) to make a call.

- For an international call, touch add "+" to add
- + to the phone number.
- 4 To end the call, touch 🗝 🔳

## **Using preset numbers**



### 1mportant

To perform this operation, be sure to park your vehicle and apply the parking brake.

### Assigning preset numbers

Numbers that you dial frequently can be assigned to presets for quick recall.

You can assign up to 6 frequently called phone numbers to number presets.

### Select a desired phone number from the Phone Book or the Call History. Or directly enter a desired phone number.

To select a desired phone number from the Phone Book or the Call History, see the instructions explained in previous pages. To directly enter a desired phone number, see Making a call by entering phone number on this page.

The display should now be the normal display and the selected phone number is displayed on the information bar.

### Keep touching one of preset assignments to store the phone number.

The phone number you selected is stored in presets.

- When P1 to P6 are not displayed, you can display them by touching LIST.
- **No Data** is displayed for empty assignment. Even if the assignment is taken, you can replace it to the new one by keeping touching the assignment.

## **Recalling preset numbers**

### Touch one of preset assignments.

The selected phone number should now be displayed on the information bar.

When P1 to P6 are not displayed, you can display them by touching LIST.

#### Touch \( \bigce \) to make a call.

#### To end the call, touch -.

The estimated call time appears in the display (this may differ slightly from the actual call time). 🔳

## Making a call by entering phone number



### Important

To perform this operation, be sure to park your vehicle and apply the parking brake.

### Touch DIRECT to display the direct dial display.

#### 2 Touch 0 to 9 to input numbers.

- For an international call, touch add "+" to add + to the phone number.
- If you want to store the entered phone number to preset assignment, touch **SET** here. The display returns to the normal display and the phone number you entered is selected.
- Touch CLEAR to delete the number. Touch and hold **CLEAR** to delete all the input numbers.
- Up to 24 digits can be entered.

#### When you completed entering the number, touch 🗸 to make a call.

#### To end the call, touch -.

The estimated call time appears in the display (this may differ slightly from the actual call time). 🔳

## Clearing memory

Touch CLEAR MEMORY on the function menu.

# 2 Touch CLEAR next to the item you want to delete from the memory.

Select from the following:

- PHONEBOOK (phone book)
- Dialed Calls (dialled call history)
- Received Calls (received call history)
- Missed Calls (missed call history)
- Preset Dials (preset phone numbers)

After selecting a desired item, a confirmation display appears. Touch **OK** to delete the memory.

- If you do not want to clear memory that you have selected, touch CANCEL.
- If you want to clear all the Phone Book, dialled/received/missed call history list and preset phone number, touch CLEAR ALL.

# Setting the automatic answering

- Touch AUTO ANSWER on the function menu to turn the automatic answer on.
- To turn the automatic answer off, touch **AUTO ANSWER** again. ■

# **Setting the automatic rejecting**

- Touch REFUSE ALL CALLS on the function menu to turn the automatic call rejection on.
- To turn the automatic call rejection off, touch **REFUSE ALL CALLS** again. ■

## Switching the ring tone

- Touch RING TONE on the function menu to turn the ring tone on.
- To turn the ring tone off, touch **RING TONE** again. ■

# Echo canceling and noise reduction

- Touch ECHO CANCEL on the function menu to turn Echo Cancel function on.
- To turn echo canceling off, touch **ECHO CANCEL** again. ■

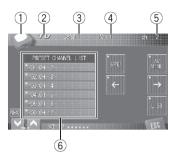
# Displaying BD (Bluetooth Device) address

• Touch DEVICE INFO on the function menu to display the BD address.

Various information regarding the Bluetooth wireless technology are displayed.

- BD ADDRESS (system address)
- SYSTEM NAME (system name)
- SYSTEM VER. (version)
- **BT MODULE VER.** (Bluetooth module version)

### Watching the television



You can use this unit to control a TV tuner (e.g. GEX-P5750TV (P)), which is sold separately. For details concerning operation, refer to the TV tuner's operation manual. This section provides information on TV operations with this unit which differs from that described in the TV tuner's operation manual.

### [ Important

Depending on the TV tuner connected to this unit, some functions may not be operable. For details, refer to the TV tuner's operation manual.

1 Source icon

Shows which source has been selected.

② Source name

Shows the selected source name.

3 Band indicator

Shows which band the TV tuner is tuned to.

(4) Preset number indicator

Shows which preset has been selected.

(5) Channel indicator

Shows which channel the TV tuner is tuned.

6 Preset list display

Shows the preset list.

- 1 Touch the source icon and then touch TV to select the TV.
- 2 Touch the screen to display the touch panel keys.
- 3 Touch BAND to select a band.

Touch **BAND** repeatedly until the desired band is displayed, **BAND 1** or **BAND 2**.

### 4 To perform manual tuning, briefly touch ← or →.

The channels move up or down step by step.

- You can also perform manual tuning by moving the joystick left or right.
- 5 To perform seek tuning, keep touching

  ← or → for about one second and release.

The tuner will scan the channels until a broadcast strong enough for good reception is found.

- If you keep touching ← or → you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.
- You can also perform seek tuning by holding the joystick left or right.



If you do not use the touch panel keys within 30 seconds, they will be hidden automatically.

#### Storing and recalling broadcast stations

If you touch any of the preset tuning keys **P01** to **P12** you can easily store up to 12 broadcast stations for later recall with the touch of a key.

#### TV tuner

 When you find a station that you want to store in memory, keep touching one of preset tuning keys P01 to P12 until the beep sounds.

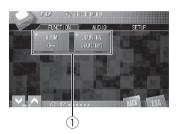
The next time you touch the same preset tuning key the station is recalled from memory.

- To switch between **P01** to **P06** and **P07** to **P12**, touch **PREV** or **NEXT**.
- When **P01** to **P06** and **P07** to **P12** are not displayed, you can display them by touching **LIST**.



- Up to 24 stations, 12 for each of two TV bands, can be stored in memory.
- You can also use ↑ and ↓ to recall stations assigned to preset tuning keys P01 to P12 when P01 to P12 are not displayed.

# Introduction of advanced TV tuner operation



- Function display
   Shows the function names.
- 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

- 2 Touch ESC to return to the TV picture.
- To return to the previous display, touch **BACK**. ■

# Storing the strongest broadcast stations sequentially

• Touch BSSM on the function menu to turn BSSM on.

**BSSM** begins to flash. While **BSSM** is flashing the 12 strongest broadcast stations will be stored in order from the lowest channel up. When finished, **BSSM** stops flashing.

• To cancel the storage process, touch **BSSM** again.



Storing broadcast stations with BSSM may replace broadcast stations you have saved using **P01** to **P12**.

### Selecting the area group

• Touch COUNTRY on the function menu to select the area group.

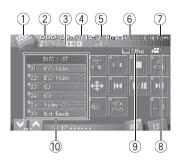
Touch **COUNTRY** repeatedly until the desired area group appears in the display.

**COUNTRY 1** (CCIR channel)—**COUNTRY 2** (IN channel)—**COUNTRY 3** (CHN channel)—

COUNTRY 4 (U.K. channel)—COUNTRY 5 (OIRT channel)—COUNTRY 6 (AUSTRALIA channel)—COUNTRY 7 (SAF channel)

#### **DVD Player**

### Playing a disc



You can use this unit to control a DVD player or multi-DVD player, which is sold separately. For details concerning operation, refer to the DVD player's or multi-DVD player's operation manual. This section provides information on DVD operations with this unit which differs from that described in the DVD player's or multi-DVD player's operation manual.

- When operating DVD player/multi-DVD player by using the touch panel keys, refer to built-in DVD player operation.
  - When using a DVD player or multi-DVD player, you cannot operate the DVD menu by touching the menu item directly.
- This unit does not have ITS playlist and disc title functions.
- Switch the remote control selection to suitable setting to operate DVD players. (Refer to page 107.)
- Switch the remote control operation mode to **DVD** to operate the DVD player by using remote control. (Refer to page 19.)

#### 1) Source icon

Shows which source has been selected.

#### ② Disc type indicator

Shows the type of the currently playing disc.

#### 3 Audio language indicator

Shows which audio language has been selected when playing DVD video.

#### **4** Disc number indicator

Shows the disc number currently playing when using a multi-DVD player.

#### 5 Title/Folder number indicator

Shows the title (when playing DVD video) or folder (when playing compressed audio) of the selection currently playing.

#### 6 Chapter/track number indicator

Shows the chapter (when playing DVD video) or track (when playing Video CD, CD or compressed audio) currently playing.

#### Play time indicator

Shows the elapsed playing time of the current chapter/track.

#### **8** Viewing angle indicator

Shows which viewing angle has been selected when playing DVD video.

#### 9 Subtitle language indicator

Shows which subtitle language has been selected when playing DVD video.

#### 10 Disc list display

Shows the list of the disc type when using a multi-DVD player.

- 1 Touch the source icon and then touch S-DVD to select the DVD player.
- 2 Touch the screen to display the touch panel keys.

### 3 To skip back or forward to another chapter/track, briefly touch | ◄ or ▶ ▶ |.

 You can also skip back or forward to another chapter/track by moving the joystick left or right.

#### **DVD Player**

When using the thumb pad on the remote control, switch the remote control operation mode to **AVH**. (Refer to page 19.)

## 4 To perform fast forward or reverse, keep touching | ◀ ◀ or ▶ ▶ |.

 You can also perform fast reverse/fast forward by holding the joystick left or right.
 When using the thumb pad on the remote control, switch the remote control operation mode to AVH. (Refer to page 19.)



If you do not use the touch panel keys within 30 seconds, they will be hidden automatically when playing DVD video or Video CD.

# Turning the DVD player on or off

- Only the remote control can operate this function. To perform this function, switch the remote control operation mode to **DVD**. (Refer to page 19.)
- Press REAR SOURCE to turn the DVD player on.
- To turn the DVD player off, press **REAR SOURCE** again. ■

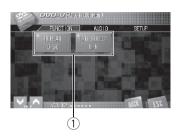
### Selecting a disc

- You can operate this function only when a multi-DVD player is connected to this unit.
- Touch any of 01 to 06 to select the desired disc.
- When 01 to 06 are not displayed, you can display them by touching LIST.

You can also select a disc by pressing ▲/▼
(TILT/DISC) on the remote control when the remote control operation mode is switched to DVD.

### **DVD Player**

# Introduction of advanced DVD player operation



### ① Function display

Shows the function names.

## 1 Touch AV MENU and then touch FUNCTION to display the function names.

The function names are displayed and operable ones are highlighted.

# 2 Touch ESC to return to the playback display.

■ To return to the previous display, touch **BACK**. ■

### Repeating play

- During playback of Video CDs featuring PBC (playback control), this function cannot be operated.
- Touch REPEAT on the function menu to select the repeat range.

#### **During DVD video playback**

- **DISC** Repeat the current disc
- **CHAPTER** Repeat just the current chapter
- TITLE Repeat just the current title

#### **During Video CD or CD playback**

- **DISC** Repeat the current disc
- TRACK Repeat just the current track

#### **During compressed audio playback**

• **DISC** – Repeat the current disc

- FOLDER Repeat the current folder
- TRACK Repeat just the current track



- If you select other discs during repeat play, the repeat play range changes to DISC.
- When playing back Video CD or CD, if you perform track search or fast forward/reverse during TRACK, the repeat play range changes to DISC.
- When playing back compressed audio, if you select another folder during repeat play, the repeat play range changes to **DISC**.
- When playing back compressed audio, if you perform track search or fast forward/reverse during TRACK, the repeat play range changes to FOLDER.

#### Playing tracks in random order

- You can operate this function during CD and compressed audio playback.
- Touch RANDOM on the function menu to turn random play on.

Tracks will play in a random order.

■ To turn random play off, touch **RANDOM** again. ■

# Scanning tracks of a CD and compressed audio

- You can operate this function during CD and compressed audio playback.
- 1 Touch SCAN on the function menu to turn scan play on.

The first 10 seconds of each track is played.

2 When you find the desired track touch SCAN again. •

### **Selecting audio output**

When playing DVD video discs recorded with LPCM audio, or Video CD discs, you can switch the audio output.

- This function is not possible when disc playback has been stopped.
- Touch L/R SELECT on the function menu to select the audio output.

Touch **L/R SELECT** repeatedly until the desired audio output appears in the display.

- L+R left and right
- LEFT left
- **RIGHT** right ■

# Introduction to built-in DSP features



We recommend that you record the settings in the sheet on page 129 after you have completed audio adjustments.

#### **DSP** modes

This unit features two DSP modes: the network mode and the standard mode. You can switch between DSP modes as desired. Initially, the DSP mode is set to the standard mode. (Refer to *Switching the DSP setting mode* on page 110.)

- Auto TA and EQ can be used for the standard mode only. (Refer to Auto TA and EQ (auto-time alignment and auto-equalizing) on page 96 and Using the auto-equalizer on page 96.)
- A 2-way front speaker output can be used for the network mode only.



Switching the DSP mode erases the current adjusting audio settings (**LAST MEMORY**). If needed, memorize it into custom settings (**CUSTOM1**, **CUSTOM2** or **CUSTOM3**).

# Output channel modes (2CH/Multi CH)

This unit has two output channel modes for each DSP mode: the 2-channel mode and the multi-channel mode. You can switch between output channel modes depending on the source that you have selected.

 Dolby Pro Logic II/Dolby Digital EX and DTS Neo:6 (Dolby/DTS) can be used for multichannel mode only.

- Graphic equalizer (GRAPHIC EQ) can be used for 2-channel mode only.
- Parametric equalizer (PARAMETRIC EQ) can be used for multi-channel mode only.



When selecting 2-channel mode, audio does not be output from front center and rear center speakers.

# Sound settings (SETTING1, SETTING2 or SETTING3)

Created acoustic sound field can be stored in this unit and called up easily. Additionally, this unit stores the sound setting and output channel information for each source group. Changing the source switches sound setting and output channel information for each source group at the same time.

Three types of sound settings can be set and stored for both 2-channel mode and multi-channel mode independently. Moreover, sound settings can be stored for both the network mode and the standard mode. Therefore, a total of 12 types of sound settings can be set and stored.

- Auto TA and EQ (refer to Auto TA and EQ (auto-time alignment and auto-equalizing) on page 96) can be performed only when the standard mode is selected. Performing Auto TA and EQ creates auto settings (AUTO) which are adjusted finely for both 2-channel mode and multi-channel mode. However, AUTO cannot be customized.
- Auto TA and EQ (refer to Auto TA and EQ (auto-time alignment and auto-equalizing) on page 96) is carried out depending on the speaker setting (refer to Setting the speaker setting on page 91) in SETTING1.

#### Source groups

Each source stores both sound settings and output channels information. When a DVD player (built-in or optional) is selected as a source, the each medium stores these settings independently.

Media of DVD player are listed as follows:

- DVD audio
- DVD video and DVD-VR
- Video CD
- CD (CD-DA)
- DTS-CD
- · Compressed audio files
- DivX video files



External unit 1 and external unit 2 are set to the same value automatically.

# Custom settings (CUSTOM1, CUSTOM2 and CUSTOM3)

Following functions can store the settings in the custom settings (**CUSTOM1**, **CUSTOM2** and **CUSTOM3**). Custom settings are common to sound settings (**SETTING1**, **SETTING2** and **SETTING3**).

- Speaker setting (**SPEAKER SETTING**)
- Cut-off frequency setting (**CUT OFF**)
- Time alignment setting (TIME ALIGNMENT)
- Speaker level setting (SPEAKER LEVEL)
- Parametric equalizer setting (PARAMETRIC EQ) (when selecting multichannel mode only)
- Graphic equalizer setting (**GRAPHIC EQ**) (when selecting 2-channel mode only)

### Audio setup procedure Standard mode

First, perform Auto TA and EQ. Auto TA and EQ creates finely-tuned sound field for both 2-

channel mode and multi-channel mode according to your vehicle interior acoustic characteristics. (Refer to *Auto TA* and *EQ* (auto-time alignment and auto-equalizing) on page 96.) If AUTO TA and EQ has been completed, sound setting is set to **AUTO**.

Basically, that's all you need to do to adjust the audio setting and no other fine tuning is necessary.

However, according to your wishes, it is possible to customize audio settings based on Auto TA and EQ settings. By carrying out the following settings/adjustments in the order shown, you can customize sound field effortlessly.

- Switching the sound settings (SOUND SETTING)
- Customizing the speaker setting (SPEAKER SETTING)
- Using the cut-off frequency (**CUT OFF**)
- Adjusting the time alignment (TIME ALIGNMENT)
- Adjusting the speaker output levels (SPEAKER LEVEL)
- Adjusting 3-band parametric equalizer
   (PARAMETRIC EQ) (when selecting multichannel mode only)
- Adjusting 13-band graphic equalizer (GRAPHIC EQ) (when selecting 2-channel mode only)

#### **Network mode**

Make sure of the following settings before performing finely audio adjustments.

Function	Setting	Page
Digital Direct	OFF	83
PARAMETRIC EQ/ GRAPHIC EQ	FLAT	88, 90
FADER/BALANCE	FRONT 0/REAR 0/ LEFT 0/RIGHT 0	82
Dolby/DTS	OFF	83

By carrying out the following settings/adjustments in the order shown, you can create a finely-tuned sound field effortlessly.

- Switching the sound settings (SOUND SETTING)
- Using the position selector (POSITION)
- Customizing the speaker setting (SPEAKER SETTING)
- Using the cut-off frequency (**CUT OFF**)
- Adjusting the time alignment (TIME ALIGNMENT)
- Adjusting the speaker output levels (SPEAKER LEVEL)
- Adjusting 3-band parametric equalizer (PARAMETRIC EQ) (when selecting multichannel mode only)
- Adjusting 13-band graphic equalizer (GRAPHIC EQ) (when selecting 2-channel mode only)

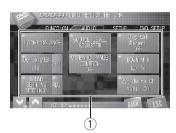
#### **Extra functions**

These functions are helpful in adjusting the sound to suit your system or your personal preferences.

- Using balance adjustment
  - (FADER/BALANCE)
- Adjusting source levels (SOURCE LEVEL ADJUSTER)
- Using the direct control (Digital Direct)
- Listening in surround sound (Dolby/DTS)
   (when selecting multi-channel mode only)
- Using the dynamic range control (DYNAMIC RANGE CONTROL)
- Using the down-mix function

(DOWN MIX)

# Introduction of audio adjustments



#### 1 Audio display

Shows the audio function names.

### 1 Touch AV MENU to display the audio function names.

The audio function names are displayed and operable ones are highlighted.

- When selecting the FM as the source, you cannot switch to **SOURCE LEVEL ADJUSTER**.
- When selecting 2-channel mode, you cannot switch to **Dolby/DTS**.

## 2 Touch ESC to return to the display of each source.

■ To return to the previous display, touch **BACK**. ■

### **Using balance adjustment**

You can change the fader/balance setting so that it can provide you an ideal listening environment in all occupied seats.

1 Touch FADER/BALANCE on the audio function menu.

# 2 Touch ∧ or ∨ to adjust front/rear speaker balance.

Each time you touch ∧ or ∨ it moves the front/rear speaker balance towards the front or the rear.

**FRONT 25** to **REAR 25** is displayed as the front/rear speaker balance moves from front to rear.

### 3 Touch **⟨** or **⟩** to adjust left/right speaker halance.

Each time you touch **<** or **>** it moves the left/ right speaker balance towards the left or the right.

**LEFT 25** to **RIGHT 25** is displayed as the left/right speaker balance moves from left to right. •

### **Adjusting source levels**

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- Settings are based on the FM volume level, which remains unchanged.
- 1 Compare the FM volume level with the level of the source you wish to adjust.
- 2 Touch SOURCE LEVEL ADJUSTER on the audio function menu.

### 3 Touch ∧ or ∨ to adjust the source volume.

Each time you touch ∧ or ∨ it increases or decreases the source volume.

**+14dB** to **-14dB** is displayed as the source volume is increased or decreased.

### Motes

- Video CD, CD, compressed audio and DivX are set to the same source level adjustment volume automatically.
- DVD video and DVD audio are set to the same source level adjustment volume automatically.
- External unit 1 and external unit 2 are set to the same source level adjustment volume automatically.

### **Using the direct control**

You can override audio settings to check for effectiveness of your audio settings.

- All audio functions are locked out when the direct control is on except VOLUME, Dolby PL II/EX and DTS Neo:6.
- Touch Digital Direct on the audio function menu to turn the direct control on.
- To turn direct control off, touch **Digital Direct** again.



When selecting 2-channel mode, the following occurs:

- If **Digital Direct** is turned on, output setting is switched to **MCH** automatically.
  - If **Digital Direct** is turned off, output setting is returned to **2CH** automatically.

### Listening in surround sound

Using this unit, you can listen to any source in surround sound. However, the options available will depend on your speaker setup and the type of source you are listening to.

You can select **Dolby PL II/EX** or **DTS Neo:6**.

- When selecting 2CH (2-channel mode), you cannot use this function. (Refer to Switching between the multi-channel output and 2-channel output on page 86.)
- If both the front center and the rear speakers are set to OFF, you cannot use this function.

#### **Recalling surround sound settings**

• Touch Dolby/DTS on the audio function menu to select your favorite setting.

Touch **Dolby/DTS** repeatedly to switch between the following settings:

**OFF** (off)—**Dolby PL II/EX** (Dolby Pro Logic II/Dolby Digital EX)—**DTS Neo:6** (DTS Neo:6)

#### Using the Dolby Pro Logic II/EX

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources to achieve high-purity matrix surround.

- If both the center and the rear speakers are set to **OFF**, you cannot use this function.
- Dolby Pro Logic II supports up to 48kHz sampling rate stereo source and has no effect on other types of source.

# 1 Touch Dolby/DTS on the audio function menu to select Dolby PL II/EX.

Refer to *Recalling surround sound settings* on this page.

#### 2 Touch ADJ. next to Dolby/DTS.

## 3 Touch any of the following touch panel keys to select the desired mode.

- MOVIE The Movie mode suitable for movie playback
- MUSIC The Music mode suitable for music playback
- MATRIX The Matrix mode for when FM radio reception is weak

 You can operate MUSIC ADJUSTMENT only when MUSIC has been selected.

#### **Adjusting the Music mode**

You can adjust the Music mode with the following three controls.

- Panorama (PANORAMA) extends the front stereo image to include the surround speakers for an exciting "wraparound" effect.
- Dimension (**DIMENSION**) allows you to gradually adjust the sound field either towards the front or the rear.
- Center Width Control (CENTER WIDTH) allows center-channel sounds to be positioned between the center speaker and the left/right speakers. It improves the left-center-right stage presentation for both the driver and the front passenger.

#### 1 Touch MUSIC to adjust music mode.

Refer to *Using the Dolby Pro Logic II/EX* on this page.

### 2 Touch PANORAMA to turn the Panorama control on.

■ To turn the Panorama control off, touch **PANORAMA** again.

### 3 Touch **〈** or **〉** to adjust DIMENSION (dimension).

Each time you touch **<** or **>** it moves the sound towards the front or the surrounds. **+3** to **−3** is displayed as the front/surround speaker balance moves from front to sur-

rounds.

## 4 Touch **〈** or **〉** to adjust CENTER WIDTH (center width control).

Each time you touch **<** or **>** it gradually spreads the center channel sound into the front left and right speakers over a range **0** to **7**.

3 is the default and it's recommended for most recordings. 0 places all center sound in the center speaker. 7 places all center sound equally in the left/right speakers.

#### **Using the DTS Neo:6**

DTS Neo:6 can generate 6.1 channel surround sound from any matrixed stereo source (such as video or TV) and from 5.1 channel sources.

### 1 Touch Dolby/DTS on the audio function menu to select DTS Neo:6.

Refer to *Recalling surround sound settings* on the previous page.

- 2 Touch ADJ. next to Dolby/DTS.
- 3 Touch either of the following touch panel keys to select the desired mode.
  - CINEMA The Cinema mode suitable for movie playback
  - MUSIC The Music mode suitable for music playback
- You can operate **MUSIC ADJUSTMENT** only when **MUSIC** has been selected.
- With the DTS Neo:6, audio and voice from TV or radio may be breaking up. In such case, we recommend you to turn the DTS Neo:6 off.

#### **Adjusting the Music mode**

In music mode, you can adjust the center image to create a wider stereo effect with vocals. Adjust the effect from  $\mathbf{0}$  (all center channel sent to front right and left speakers) to  $\mathbf{10}$  (center channel sent to the center speaker only).

**1 Touch MUSIC to adjust music mode.** Refer to *Using the DTS Neo:6* on this page.

# 2 Touch **〈** or **〉** to adjust CENTER IMAGE (center image).

Each time you touch  $\P$  or  $\P$  it gradually spreads the center channel sound into the front left and right speakers over a range  $\P$  to  $\P$ .

# Using the dynamic range control

The dynamic range refers to the difference between the largest and softest sounds. The dynamic range control compresses this difference so that you can clearly hear sounds even at low volume levels.

- The dynamic range control is effective only on Dolby Digital sounds.
- The dynamic range control may produce little effect on certain discs.
- Touch DYNAMIC RANGE CONTROL on the audio function menu to turn the dynamic range control on.
- To turn dynamic range control off, touch **DYNAMIC RANGE CONTROL** again. ■

### Using the down-mix function

The down-mix function allows you to play back multi-channel audio in 2 channels.

- Touch DOWN MIX on the audio function menu to switch the setting.
  - Lt/Rt Down mix so that the surround components can be restored (decoded).
  - Lo/Ro Stereo mix the original audio that do not contain channel modes such as surround components.

### Switching the sound settings

You can switch the acoustic sound field stored in this unit according to the source you are listening to. For detailed instructions on creating the acoustic sound field, refer to *Introduction of sound settings* on the next page.

• Touch SOUND SETTING on the audio function menu to switch the sound setting. Touch SOUND SETTING repeatedly to switch between the following settings:

**SETTING1** (user setting 1)—**SETTING2** (user setting 2)—**SETTING3** (user setting 3)—**AUTO** (setting created by auto TA & EQ)

- You can also switch the sound setting by pressing SOUND SETTING.
- You cannot select AUTO when NETWORK
  has been selected. (Refer to Switching the DSP
  setting mode on page 110.)
- When STANDARD has been selected, you cannot select AUTO if Auto TA and EQ has not been carried out.

# Touch 2CH/Multi CH on the audio function menu to switch the mode. Touch 2CH/Multi CH reportedly until the do.

Touch **2CH/Multi CH** repeatedly until the desired mode appears in the display.

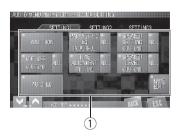
- MCH Multi-channel audio output
- 2CH 2-channel audio output (stereo)
- You can also switch the output setting by pressing **2CH/Multi CH**. ■

# Switching between the multi-channel output and 2-channel output

You can switch the output channel between the multi-channel output and 2-channel output according to the source you are listening to.

- Selecting **2CH** changes the audio settings as below:
  - Both the front center and rear center speakers are turned off automatically in the speaker setting. (Refer to page 91.)
  - Both Dolby Pro Logic II/Dolby Digital EX and DTS Neo:6 switch to **OFF**. (Refer to page 83.)

### Introduction of sound settings



Sound setting display

Shows the sound setting function names.

1 Touch AV MENU to display the audio function names.

The audio function names are displayed and operable ones are highlighted.

2 Touch ADJ. next to SOUND SETTING to display the sound setting function names.

The sound setting function names are displayed.

- **AUTO** cannot be customized. When **AUTO** is selected, select the other sound settings by touching **SOUND SETTING**.
- 3 Touch any of SETTING1, SETTING2 or SETTING3 to select the sound setting to be adjusted.
- 4 Touch ESC to return to the display of each source.
- To return to the previous display, touch BACK.

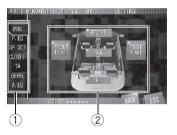


If speakers are muted on the setting/adjustment items of the sound setting display, muting is not canceled even when you switch the items. However, when you adjust the speaker output levels using the test tone (refer to Adjusting the speaker

output levels using a test tone on page 94), muting is canceled automatically.

### Sound setting function display

Touching the sound setting selection keys enables you to cross-refer the other adjustments. Even in the adjustment screen, it is possible to refer and set another setting menus.



① Sound setting selection keys

Touch to recall the desired sound setting function.

② Sound setting function display
Shows the adjustment screen of the selected sound setting function. •

### Using the position selector

One way to assure a more natural sound is to accurately position the stereo image, putting you right in the center of the sound field. The position selector function lets you automatically adjust the speaker output levels and inserts a delay time to match the number and position of occupied seats.

### 1 Touch POSITION on the sound setting menu.

# 2 Touch any of the following touch panel keys to select a listening position.

- FRONT LEFT Front seat left
- FRONT RIGHT Front seat right
- FRONT Front seats
- ALL All seats
- To cancel the selected listening position, touch **OFF**.



When you make adjustments to the listening position, the speaker outputs are automatically set for appropriate levels. You can tailor the levels more precisely referring to Adjusting the speaker output levels on page 94.

### **Recalling equalizer curves**

The equalizer lets you adjust the equalization to match car interior acoustic characteristics as desired.

There are eight stored equalizer curves which you can easily recall at any time. Here is a list of the equalizer curves:

Equalizer curve
Super bass
Powerful
Natural
Vocal
Flat
Custom 1
Custom 2
Custom 3

- CUSTOM1, CUSTOM2 and CUSTOM3 are adjusted equalizer curves.
- When FLAT is selected no supplement or correction is made to the sound. This is useful to check the effect of the equalizer

curves by switching alternatively between **FLAT** and a set equalizer curve.

# When selecting multi-channel mode

• Touch PARAMETRIC EQ on the sound setting menu to select the equalizer.

Touch **PARAMETRIC EQ** repeatedly to switch between the following equalizers:

POWERFUL—NATURAL—VOCAL—FLAT—CUSTOM1—CUSTOM2—CUSTOM3—LAST MEMORY—SUPER BASS (S. BASS)

 You can select LAST MEMORY only when the adjusted equalizer curve is not memorized in this unit.

#### When selecting 2-channel mode

• Touch GRAPHIC EQ on the sound setting menu to select the equalizer.

Touch **GRAPHIC EQ** repeatedly to switch between the following equalizers:

POWERFUL—NATURAL—VOCAL—FLAT—CUSTOM1—CUSTOM2—CUSTOM3—LAST MEMORY—SUPER BASS (S. BASS)

■ You can select **LAST MEMORY** only when the adjusted equalizer curve is not memorized in this unit. ■

# Adjusting 3-band parametric equalizer

For custom equalizer curves (**CUSTOM1** to **CUSTOM3**), you can adjust the front, rear, front center and rear center equalizer curves separately by selecting a center frequency, an equalizer level, and a Q factor for each band.

 Custom equalizer curves can be created common to all sources.

 The center speaker largely determines the sound image and getting the balance right isn't easy. We recommend reproducing a 2ch. audio (a CD for example) and getting the balance right among the speakers except for the center, and then reproducing a 5.1-ch. audio (Dolby Digital or DTS) and adjusting the center speaker output to the balance you have already got among the other speakers.

### 1 Touch ADJ. next to PARAMETRIC EQ on the sound setting menu.

# 2 Touch LR Common/LR Independent to switch the equalizer adjustment method.

- LR Common Adjusts left and right speakers simultaneously.
- **LR Independent** Adjusts left and right speakers separately.

#### 3 Touch EQ to select the equalizer.

Touch **EQ** repeatedly to switch between the following equalizers:

POWERFUL—NATURAL—VOCAL—FLAT—CUSTOM1—CUSTOM2—CUSTOM3—LAST MEMORY—SUPER BASS (S. BASS)

- You can also select the equalizer by using **EQUALIZER LIST**.
- To close the equalizer curve list, touch CLOSE.
- You can select LAST MEMORY only when the adjusted equalizer curve is not memorized in this unit.

# 4 Touch **<** or **>** next to SPEAKER to select the speaker to be adjusted.

Touch  $\P$  or  $\P$  until the desired speaker appears in the display.

FRONT LEFT (front left speaker)—
FRONT RIGHT (front right speaker)—
REAR LEFT (rear left speaker)—REAR RIGHT (rear right speaker)—FRONT CENTER (front center speaker)—REAR CENTER (rear center speaker)

- You can mute the selected speaker unit by touching <a> To cancel muting, touch <a> Council muting</a>.
- You cannot select speakers whose size is set at **OFF**. (Refer to *Customizing the speaker setting* on page 91.)

### 5 Touch BAND to select the equalizer band to be adjusted.

Each time you touch **BAND** it selects equalizer bands in the following order:

LOW (low)—MID (mid)—HIGH (high)

#### 

Touch **〈** or **〉** until the desired frequency appears in the display.

40—50—63—80—100—125—160—200— 250—315—400—500—630—800—1k— 1.25k—1.6k—2k—2.5k—3.15k—4k—5k— 6.3k—8k—10k—12.5k (Hz)

■ You can select a center frequency from among 20 frequencies for each band. You can change the center frequency in 1/3-octave steps, but you cannot select frequencies that have intervals shorter than 1 octave among the center frequencies of the three bands.

### 7 Touch ∧ or ∨ to adjust the equalizer level.

Each time you touch o or it increases or decreases the equalizer level. +12dB to −12dB is displayed as the level is increased or decreased.

• When you adjust the speaker loudness with selecting **LR Common**, the equalizer levels of both side speakers are changed simultaneously. Thus, if the equalizer level of one speaker is at maximum or minimum, the level of the other speaker is at full limit in opposite direction.

### 8 Touch Q.Fac to select the desired Q factor.

Each time you touch **Q.Fac** it switches between the following Q factor: **1.2** (wide)—**3.6** (narrow)

• You can adjust parameters for each band of the other speakers in the same way.



You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to *Storing the adjusted audio settings in memory* on page 96.

# Adjusting 13-band graphic equalizer

For custom equalizer curves (**CUSTOM1** to **CUSTOM3**), you can adjust the level of each band.

 Custom equalizer curves can be created common to all sources.

### 1 Touch ADJ. next to GRAPHIC EQ on the sound setting menu.

## 2 Touch LR Common/LR Independent to switch the equalizer adjustment method.

- LR Common Adjusts left and right speakers simultaneously.
- LR Independent Adjusts left and right speakers separately.

#### 3 Touch EQ to select the equalizer.

Touch **EQ** repeatedly to switch between the following equalizers:

POWERFUL—NATURAL—VOCAL—FLAT— CUSTOM1—CUSTOM2—CUSTOM3— LAST MEMORY—SUPER BASS (S. BASS)

- You can also select the equalizer by using EOUALIZER LIST.
- To close the equalizer curve list, touch CLOSE.
- You can select LAST MEMORY only when the adjusted equalizer curve is not memorized in this unit.

## 4 Touch **〈** or **〉** next to SPEAKER to select the speaker to be adjusted.

Touch **<** or **>** until the desired speaker appears in the display.

**LEFT** (left speakers)—**RIGHT** (right speakers)

- If either the front or rear speakers has been muted on the setting/adjustment items of the sound setting display (refer to *Introduction of sound settings* on page 87), **X** flashes.
- You can mute the selected speaker units by touching <.

## 5 Touch or > to select the equalizer band to be adjusted.

Touch **〈** or **〉** until the desired equalizer band appears in the display.

50—80—125—200—315—500—800—1.25k —2k—3.15k—5k—8k—12.5k (Hz)

## 6 Touch ∧ or ∨ to adjust the level of the equalizer band.

Each time you touch ∧ or ∨ it increases or decreases the level of the equalization band.

- **+12dB** to **-12dB** is displayed as the level is increased or decreased.
- When you adjust the speaker loudness with selecting **LR Common**, the equalizer levels of both side speakers are changed simultaneously. Thus, if the equalizer level of one speaker is at maximum or minimum, the level of the other speaker is at full limit in opposite direction.
- You can then select another band and adjust the level.



You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to *Storing the adjusted audio settings in memory* on page 96.

### Setting the speaker setting

You can make a fine adjustment on each speaker installed in your vehicle. You can change the size of each speaker according to the speaker specification. On a spot at which a speaker is not installed, you can set the adjustment to **OFF**.

The adjustment you made will be memorized into this unit and you can recall it.

#### **Recalling speaker settings**

• Touch SPEAKER SETTING on the sound setting menu to select the speaker setting. Touch SPEAKER SETTING repeatedly to switch between the following speaker settings:

### CUSTOM1—CUSTOM2—CUSTOM3—AUTO —LAST MEMORY

- You can select LAST MEMORY only when the adjusted speaker setting is not memorized in this unit
- You cannot select **AUTO** when **NETWORK** has been selected. (Refer to *Switching the DSP setting mode* on page 110.)
- When STANDARD has been selected, you cannot select AUTO if auto TA and EQ has not been carried out.

#### **Customizing the speaker setting**

You need to make with/without (or yes/no) and size (bass reproducing capacity) selection/adjustments depending on the installed speakers. The size needs to be set to **LARGE** (large) if the speaker is capable of reproducing sounds of about 100 Hz or below. Otherwise select **SMALL** (small).

- Low frequency range is not output if the subwoofer is set to OFF and the front and rear speakers set to SMALL or OFF.
- It is imperative that non-installed speakers be set to OFF.

 Set the front or rear speaker to LARGE if the speaker is capable of reproducing bass content, or if no subwoofer is installed.

## 1 Recall the speaker setting you want to adjust.

Refer to *Recalling speaker settings* on this page.

- 2 Touch ADJ. next to SPEAKER SETTING on the sound setting menu.
- 3 Touch **<** or **>** to select the correct size for the speaker.

Each time you touch **〈** or **〉** it selects the size in the following order:

**OFF** (off)—**SMALL** (small)—**LARGE** (large)

- You cannot select **OFF** in the front speaker setting.
- You can turn **ON** or **OFF** in the subwoofer setting.
- When the rear speaker setting is set to OFF, the rear center speaker switches to OFF automatically.

### **Notes**

- You can set the installed speakers or subwoofer to OFF.
- Auto TA and EQ (refer to Auto TA and EQ (auto-time alignment and auto-equalizing) on page 96) is carried out depending on the speaker setting in SETTING1 (refer to Sound settings (SETTING1, SETTING2 or SETTING3) on page 80).
  - When carrying out auto TA and EQ, the speakers set to **SMALL** or **LARGE** may be changed according to the characteristics of the speakers. However, the speakers set to **OFF** are not changed.
  - When carrying out auto TA and EQ, a speaker that is not installed or whose sound is too small is set to **OFF**.

 You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to *Storing the adjusted audio set*tings in memory on page 96.

### Using the cut-off frequency

You can adjust the cut-off frequency and slope to match the characteristics of each speaker unit. And then you can store the adjusted cut-off frequency in this unit for later recall.

# Recalling cut-off frequency settings

 Touch CUT OFF on the sound setting menu to select the cut-off frequency setting.

Touch **CUT OFF** repeatedly to switch between the following cut-off frequency settings:

### CUSTOM1—CUSTOM2—CUSTOM3—AUTO —LAST MEMORY

- You can select LAST MEMORY only when the adjusted cut-off frequency setting is not memorized in this unit.
- You cannot select **AUTO** when **NETWORK** has been selected. (Refer to *Switching the DSP* setting mode on page 110.)
- When **STANDARD** has been selected, you cannot select **AUTO** if auto TA and EQ has not been carried out.

### Selecting a cut-off frequency

You can select a frequency, under which sounds are reproduced through the subwoofer. If the installed speakers include one whose size has been set to **SMALL**, you can select a frequency, under which sounds are reproduced through a **LARGE** speaker or subwoofer.

## Recall the cut-off frequency setting you want to adjust.

Refer to Recalling cut-off frequency settings on this page.

## 2 Touch ADJ. next to CUT OFF on the sound setting menu.

- 3 Touch the speaker to be adjusted.
- You cannot select speakers whose size is set at OFF or LARGE.

## 4 Touch **<** or **>** to adjust parameters of the selected speaker unit (filter).

Adjustable parameters and ranges are different depending on each speaker unit (filter).

Parameter	What it does
FREQUENCY	Selects cut-off frequencies in the following order: 50—63—80—100—125—160—200 (Hz)
SLOPE	Selects slopes in the following order: -18— -12— -6 (dB/oct.)

#### When subwoofer is selected

Parameter	What it does
FREQUENCY	Selects cut-off frequencies in the following order: 50—63—80—100—125—160—200 (Hz)
SLOPE	Selects slopes in the following order: -18— -12— -6—0 (pass) (dB/oct.)
PHASE	Switches the phase between <b>NOR- MAL</b> and <b>REVERSE</b> .

### When tweeter is selected in the network mode

Parameter	What it does
FREQUENCY	Selects cut-off frequencies in the fol- lowing order: 1.25k—1.6k—2k—2.5k—3.15k— 4k—5k—6.3k—8k—10k—12.5k (Hz)
SLOPE	Selects slopes in the following order: <b>-12</b> — <b>-6</b> (dB/oct.)
PHASE	Switches the phase between NOR-MAL and REVERSE.

### When front speaker HPF is selected in the network mode

Parameter	What it does
FREQUENCY	Selects cut-off frequencies in the following order: 50—63—80—100—125—160—200 (Hz)
SLOPE	Selects slopes in the following order: -18— -12— -6 (dB/oct.)

To switch the filter of the front speaker between LPF and HPF, touch **HIGH PASS** or **LOW PASS**.

### When front speaker LPF is selected in the network mode

Parameter	What it does
FREQUENCY	Selects cut-off frequencies in the fol- lowing order: 1.25k—1.6k—2k—2.5k—3.15k— 4k—5k—6.3k—8k—10k—12.5k (Hz)
SLOPE	Selects slopes in the following order: <b>-12</b> — <b>-6</b> — <b>0</b> (pass) (dB/oct.)

 You can mute the selected speaker unit by touching MUTE OFF. To cancel muting, touch MUTE ON.



Selecting cut-off frequencies sets cut-off frequencies of the subwoofer's L.P.F. (low-pass filter) and that of the SMALL speaker H.P.F.

- (high-pass filter). The cut-off frequency setting has no effect if the subwoofer is set to **OFF** and other speakers are set to **LARGE** or **OFF**.
- If trying to boost the bass output of the subwoofer doesn't do much or rather makes you feel that the bass gets more murky, this may indicate that the subwoofer's output and bass content you hear over other speakers cancel each other out. To remove this problem, try changing the phase setting for the subwoofer.
- You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to Storing the adjusted audio settings in memory on page 96.

### Using the time alignment

The time alignment lets you adjust the distance between each speaker and the listening position.

#### **Recalling time alignment settings**

 Touch TIME ALIGNMENT on the sound setting menu to select the time alignment.
 Touch TIME ALIGNMENT repeatedly to switch between the following time alignment settings:

## INITIAL—AUTO—CUSTOM1—CUSTOM2—CUSTOM3—LAST MEMORY—OFF

- You can select LAST MEMORY only when the adjusted time alignment setting is not memorized in this unit.
- You cannot select AUTO when NETWORK
  has been selected. (Refer to Switching the DSP
  setting mode on page 110.)
- When STANDARD has been selected, you cannot select AUTO if auto TA and EQ has not been carried out.

#### Adjusting the time alignment

You can adjust the distance between each speaker and the selected position.

 An adjusted time alignment can be memorized in CUSTOM1, CUSTOM2 or CUSTOM3.

### 1 Recall the time alignment setting you want to adjust.

Refer to *Recalling time alignment settings* on the previous page.

## 2 Touch ADJ. next to TIME ALIGNMENT on the sound setting menu.

• You cannot adjust the time alignment when neither **FRONT LEFT** nor **FRONT RIGHT** is selected in the position selector mode.

# 3 Touch < or > to adjust the distance between each speaker and the listening position.

Each time you touch **<** or **>** it increases or decreases the distance. **0.0cm** to **500.0cm** is displayed as the distance is increased or decreased.

- You can mute the selected speaker unit by touching MUTE. To cancel muting, touch MUTE again.
- You cannot select speakers whose size is set at OFF. (Refer to Customizing the speaker setting on page 91.)



You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to *Storing the adjusted audio settings in memory* on page 96.

# Adjusting the speaker output levels

You can adjust the speaker output level of each speaker unit.

#### Recalling the speaker output level settings

• Touch SPEAKER LEVEL on the sound setting menu to select the speaker output level setting.

Touch **SPEAKER LEVEL** repeatedly to switch between the following speaker output level settings:

## CUSTOM1—CUSTOM2—CUSTOM3—AUTO —LAST MEMORY

- You can select LAST MEMORY only when the adjusted speaker output level setting is not memorized in this unit.
- You cannot select **AUTO** when **NETWORK** has been selected. (Refer to *Switching the DSP setting mode* on page 110.)
- When STANDARD has been selected, you cannot select AUTO if auto TA and EQ has not been carried out.

# Adjusting the speaker output levels using a test tone

This function allows you to easily get the overall balance right among the speakers.

## 1 Recall the speaker output level settings you want to adjust.

Refer to *Recalling the speaker output level settings* on this page.

#### 2 Touch ADJ. next to SPEAKER LEVEL on the sound setting menu and then touch TEST TONE.

The test tone is outputted. It rotates from speaker to speaker in the following sequence at intervals of about two seconds. The current settings for the speaker over which you hear the test tone are shown in the display. Front left speaker—Front center speaker—Front right speaker—Rear right speaker—Rear center speaker—Rear left speaker—Subwoofer

Check each speaker output level. If no adjustments are needed, perform step 4 to stop the test tone.

- Using **TEST TONE**, the tweeters and the front speakers are adjusted same time. To adjust them separately, please refer to *Adjusting the speaker output levels finely* on this page.
- The settings do not appear for speakers whose size is set **OFF**. (Refer to *Customizing the speaker setting* on page 91.)

## 3 Touch **〈** or **〉** to adjust the speaker output level.

Each time you touch **<** or **>** it increases or decreases the speaker output level. **−24dB** to **+10dB** is displayed as the level is increased or decreased.

• The test tone rotates to the next speaker after about two seconds from the last operation.

# 4 Touch STOP to stop the test tone output.

### Notes

- You can mute the selected speaker units by touching the speaker icon (e.g., <a>a</a>) and then MUTE. When muted, MUTE is displayed instead of speaker output level. To cancel muting, touch the speaker icon and then MUTE.
- If needed, select speakers and adjust their 'absolute' output levels. (Refer to Adjusting the speaker output levels on the previous page.)

- You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to Storing the adjusted audio settings in memory on the next page.
- The adjusted speaker output level cannot be stored by each listening position. This means, memorizing a speaker output level for custom setting overwrites the levels of all listening positions.

#### Adjusting the speaker output levels finely

Speaker level can be adjusted finely by listening to an audio output. First, use test tone to adjust the approximate speaker level, and then use this function to adjust finely.

## 1 Recall the speaker output level settings you want to adjust.

Refer to *Recalling the speaker output level settings* on the previous page.

#### 2 Touch ADJ. next to SPEAKER LEVEL.

## 3 Touch **〈** or **〉** to adjust the speaker output level.

Each time you touch **<** or **>** it increases or decreases the speaker output level. **−24dB** to **+10dB** is displayed as the level is increased or decreased.

• You cannot select speakers whose size is set at **OFF**. (Refer to *Customizing the speaker setting* on page 91.)

### **Motes**

 You can store the adjusted setting in memory by using **MEMORY**. For details concerning operation, refer to Storing the adjusted audio settings in memory on the next page.

 The adjusted speaker output level cannot be stored by each listening position. This means, memorizing a speaker output level for custom setting overwrites the levels of all listening positions.

### Using the auto-equalizer

You can use this function only when **STANDARD** has been selected. (Refer to Switching the DSP setting mode on page 110.) The auto-equalizer is the equalizer curve created by auto TA and EQ (refer to Auto TA and EQ (auto-time alignment and auto-equalizing) on this page).

You can turn the auto-equalizer on or off.

### 1 Touch AUTO EQ on the sound setting menu.

 You cannot use this function if auto TA and EQ has not been carried out.

### 2 Touch ON to turn the auto-equalizer on.

■ To turn auto-equalizer off, touch **OFF**. ■

# Storing the adjusted audio settings in memory

You can store the adjusted audio settings in this unit for later recall.

- 1 Touch MEMORY.
- 2 Touch any of CUSTOM1, CUSTOM2 or CUSTOM3 to store the adjusted setting.
- 3 Touch YES to store the current setting into the selected sound setting.
- To cancel the storage process, touch **CANCEL.** ■

# Editing the name of sound settings

The name displayed for sound settings (**SETTING1**, **SETTING2** and **SETTING3**) can be changed.

- Each name can be up to 10 characters long.
- 1 Touch any of SETTING1, SETTING2 or SETTING3 on the sound setting menu.
- 2 Touch NAME EDIT.
- 3 Touch the letter you wish to input.

Key	What it does
<	Moves the cursor to the previous character position.
>	Moves the cursor to the next character position.
ш	Inputs the space.
	Switches keypad between alphabet and
ABC/123	numeric.

### 4 Touch MEMORY to store the entered name in memory.

# Auto TA and EQ (auto-time alignment and auto-equalizing)

You can use this function only when STANDARD has been selected. (Refer to Switching the DSP setting mode on page 110.) The auto-time alignment is automatically adjusted for the distance between each speaker and the listening position.

The auto-equalizer automatically measures the car interior acoustic characteristics, and then creates the auto-equalizer curve based on that information.



#### WARNING

To prevent accidents, never carry out auto TA and EQ while driving. When this function measures the car interior acoustic characteristics to create an auto-equalizer curve, a loud measurement tone (noise) may be outputted from the speakers.



- Carrying out auto TA and EQ under the following conditions may damage the speakers. Be sure to check the conditions thoroughly before carrying out auto TA and EQ.
  - When speakers are incorrectly connected. (e.g., When a rear speaker is connected to a subwoofer output.)
  - When a speaker is connected to a power amp delivering output higher than the speaker's maximum input power capability.
- If the microphone is placed in an unsuitable position the measurement tone may become loud and measurement may take a long time, resulting in a drain on battery power. Be sure to place the microphone in the specified location.

# Before operating the auto TA and EQ function

Carry out auto TA and EQ in as quiet a
place as possible, with the car engine and
air conditioning switched off. Also cut
power to car phones or portable telephones
in the car, or remove them from the car before carrying out auto TA and EQ. Sounds
other than the measurement tone (surrounding sounds, engine sound, telephones ringing etc.) may prevent correct

- measurement of the car interior acoustic characteristics.
- Be sure to carry out auto TA and EQ using the supplied microphone. Using another microphone may prevent measurement, or result in incorrect measurement of the car interior acoustic characteristics.
- When front speaker is not connected, auto TA and EQ cannot be carried out.
- Auto TA and EQ is carried out depending on the speaker setting (refer to Setting the speaker setting on page 91) in SETTING1 (refer to Sound settings (SETTING1.

#### SETTING2 or SETTING3) on page 80).

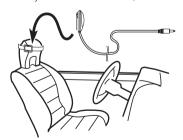
- If a speaker size is set to **OFF**, audio does not output from the speaker even when the speaker is installed.
- If you do not want to output sound from the installed speakers or subwoofer, set the speakers or subwoofer to OFF. Auto TA and EQ function is carried out depending on only the speakers and subwoofer set to SMALL, LARGE or ON.
- When this unit is connected to a power amp with input level control, auto TA and EQ may not be possible if you lower power amp input level. Set the power amp's input level to the standard position.
- When this unit is connected to a power amp with an LPF, turn off the LPF on the power amp before carrying out auto TA and EQ. In addition, the cut-off frequency for built-in LPF of an active subwoofer should be set to the highest frequency.
- The time alignment value calculated by auto TA and EQ may differ from the actual distance in the following circumstances. However, the distance has been calculated by computer to be the optimum delay to give accurate results for the circumstances, so please continue to use this value.
  - When the reflected sound within a vehicle is strong and delays occur.

- When delays occur for low sounds due to the influence of the LPF on active subwoofers or external amps.
- Auto TA and EQ changes the fader/balance settings to the center position. (Refer to page 82.)
- If you carry out auto TA and EQ when a previous setting of this already exists, the setting will be replaced.
- Even if auto TA and EQ is carried out, sound settings (SETTING1 to SETTING3) and custom settings (CUSTOM1 to CUSTOM3) are retained in the memory.

### **Carrying out auto TA and EQ**

- 1 Stop the car in a place that is as quiet as possible, close all doors, windows and the sun roof, and then turn the engine off. If the engine is left running, engine noise may prevent correct auto TA and EQ.
- 2 Fix the supplied microphone in the center of the headrest of the driver's seat, facing forward, using the belt (sold separately).

The auto TA and EQ may differ depending on where you place the microphone. If desired, place the microphone on the front passenger seat to carry out auto TA and EQ.



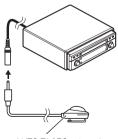
**3 Turn the ignition switch to ON or ACC.** If the car's air conditioner or heater is turned on, turn it off. Noise from the fan in the air

conditioner or heater may prevent correct auto TA and EQ.

- 4 Press SOURCE to turn the source off if this unit is turned on.
- 5 Touch the screen to display the touch panel keys.
- 6 Touch AV MENU to display the function names.

The function names are displayed and operable ones are highlighted.

- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**.
- 7 Touch NEXT and then touch AUTO EQ&TA to enter the auto TA and EQ measurement mode.
- 8 Touch either of the following touch panel keys to select the position for the seat on which the microphone is placed.
  - FRONT LEFT Front seat left
  - FRONT RIGHT Front seat right
- 9 Touch NEXT.
- 10 Plug the AUTO TA&EQ microphone into the microphone/auxiliary input jack on this unit.



AUTO TA&EQ microphone

### 11 Touch START to start the auto TA and EQ.

# 12 Get out of the car and close the door within 10 seconds when the 10-second count-down starts.

The measurement tone (noise) is outputted from the speakers, and auto TA and EQ begins.

- When all speakers are connected, auto TA and EQ is completed in about nine minutes.
- To stop auto TA and EQ, touch **STOP**.
- To cancel auto TA and EQ part way through, touch **BACK** or **ESC**.

## 13 When auto TA and EQ is completed, Complete is displayed.

When correct measurement of car interior acoustic characteristics is not possible, an error message is displayed. (Refer to *Understanding auto TA and EQ error messages* on page 120.)

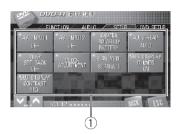
### 14 Touch ESC to cancel the auto TA and EQ mode.

## 15 Store the microphone carefully in the glove compartment.

Store the microphone carefully in the glove compartment or any other safe place. If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, color change or malfunction.

#### Setup

# Introduction of setup adjustments



① Setup menu display

Shows the setup function names.

1 Touch AV MENU and then touch SETUP to display the setup function names.

The setup function names are displayed and operable ones are highlighted.

- 2 Touch ESC to return to the display of each source.
- To return to the previous display, touch **BACK**. ■

### **Setting the AV input**

This unit is equipped with two video inputs, **VCR1 IN** and **VCR2 IN**. You can connect up to two AV components to this unit and display videos either from an **AV** source or **S-DVD** source.

Switch the AV input setting depending on the AV components connected to **VCR1 IN** and **VCR2 IN**.

- Select VIDEO to watch video of a connected component as AV source.
- Select S-DVD to watch video of a connected DVD player as S-DVD source.

Select CAMERA to watch a rear view camera video while you are backing your vehicle.



- In AV INPUT1, you can select the same setting as AV INPUT2, and vice versa.
- If you have selected the same setting in AV INPUT1 and AV INPUT2, video of the AV component connected to VCR1 IN is output.

#### When AV component is connected to AV input 1

 Touch AV INPUT1 on the setup menu to select the AV input 1 setting.

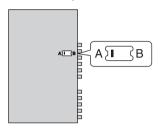
Touch **AV INPUT1** until the desired setting is selected.

- OFF No video component connected
- VIDEO External video component (such as portable video player)
- S-DVD DVD player connected with RCA cable.
- EXT-V External unit which can output video
- When a DVD player is connected with an AV-BUS cable, do not select **S-DVD** otherwise no picture will be displayed even if you select **S-DVD** as a source.

Setup

#### **About AV input 1**

Depending on the unit connected to this unit. video image may be distorted. In this case. switch the video image selecting switch on the underneath of the hide-away unit to the appropriate position to eliminate distortion. Use a thin standard tip screwdriver to switch the video image selecting switch on the underneath of the hide-away unit.



#### When AV component is connected to AV input 2

Touch AV INPUT2 on the setup menu to select your desired setting.

Touch AV INPUT2 until the desired setting is selected.

- OFF No video component connected
- VIDEO External video component (such) as portable video player)
- S-DVD DVD player connected with RCA cable
- CAMERA Rear view camera

### When rear view camera is connected to AV input 2



Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise screen image may appear reversed.

You can install a rear view camera onto the AV input 2 and display a rear view camera video. When the gear shift is in **REVERSE (R)** position, the video automatically switches to a rear view camera video. (For more details, consult vour dealer.)

- After you set up the rear view camera setting, move the gear shift in REVERSE (R) and confirm if a rear view camera video can be shown on the display.
- If the display should be switched to a rear view camera video by error while you are driving forward, change the rear view camera setting.
- To end watching a rear view camera video and return to the source display, press and hold **V.ADJUST**.
- Touch AV INPUT2 on the setup menu to select CAMERA.
- 2 Touch CAMERA POLARITY on the setup menu to select an appropriate setting for polarity.

Each time you touch **CAMERA POLARITY** it switches between the following polarity:

- BATTERY When the polarity of the connected lead is positive while the gear shift is in **REVERSE (R)** position
- **GROUND** When the polarity of the connected lead is negative while the gear shift is in **REVERSE** (**R**) position

#### Setting the automatic open **function**

To prevent the display from hitting the shift lever of an automatic vehicle when it is in P (park) position, or when you do not wish the display to open/close automatically, you can set the automatic open function in the manual mode.

Touch AUTO FLAP on the setup menu to select the display to open/close automatically or manually.

Each time you touch **AUTO FLAP** it switches between the following settings:

• AUTO – The LCD panel will be opened or closed automatically with the turning of the ianition switch on or off

#### Setup

MANUAL – You have to press
 OPEN/CLOSE to open/close the LCD panel

# Adjusting the LCD panel slide position

You can adjust the LCD panel slide position so that the panel is set back or forward.

• Touch FLAP SET BACK on the setup menu to turn the set back on.

The LCD panel slides to the back.

■ Touch **FLAP SET BACK** again to turn the set back off and the LCD panel slides to the front. ■

### **Setting the clock**

Use these instructions to set the clock.

- 1 Touch CLOCK ADJUSTMENT on the setup menu.
- 2 Touch 0 to 9 to set the clock.
- To cancel the inputted numbers, touch **C**.
- 3 Touch ENTER.



Touching **24h/12h** switches the clock display on the sub-display between 12/24-hour formats. ■

# Setting the video of rear display

You can select either showing the same source as the front display or showing the video source on rear display independently.

- When selecting FRONT and the selected source is an audio source, nothing is displayed on the rear display.
- When selecting FRONT, audio is not outputted from REAR DISPLAY OUT.

 Touch REAR MODE on the setup menu to select the video on rear display.

Each time you touch **REAR MODE** it switches between the following settings:

- FRONT Display the same source as the front display
- SEPARATE Display the video source on rear display independently of front display

# Switching the dimmer setting for sub-display

To prevent the sub-display from being too bright at night, the sub-display is automatically dimmed when the car's headlights are turned on. You can turn dimmer on or off.

- Touch SUB DISPLAY DIMMER on the setup menu to turn dimmer on.
- To turn dimmer off, touch **SUB DISPLAY DIMMER** again. ■

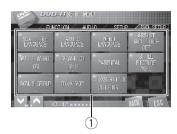
# Adjusting the contrast for the sub-display

Display contrast adjustment lets you adjust the display for easier viewing when lighting conditions change.

• Touch SUB DISPLAY CONTRAST on the setup menu to switch the contrast setting. Each time you touch

**SUB DISPLAY CONTRAST** it switches between **HIGH** (high contrast) and **LOW** (low contrast).

# Introduction of DVD setup adjustments



You can use this menu to change audio, subtitle, parental lock and other DVD settings.

- When watching a DVD/Video CD on the rear display independently, you cannot operate this menu.
- ① **DVD setup menu display**Shows the DVD setup menu names.
- 1 While playing a disc, touch AV MENU and then touch DVD SETUP to display the DVD setup function names.

The DVD setup function names are displayed and operable ones are highlighted.

- 2 Touch ESC to return to the playback display.
- To return to the previous display, touch **BACK**. ■

### **Setting the subtitle language**

You can set a desired subtitle language. If the selected subtitle language is recorded on the DVD, subtitles are displayed in that language.

# 1 Touch SUB TITLE LANGUAGE on the DVD setup menu.

A subtitle language menu is displayed.

#### 2 Touch the desired language.

A subtitle language is set.

• If you have selected **Others**, refer to *When you* select **Others** on this page.



- If the selected language is not recorded on the disc, the language specified on the disc is displayed.
- You can also switch the subtitle language by touching SUBTITLE during playback. (Refer to Changing the subtitle language during playback (Multi-subtitle) on page 36.)
- Even if you use SUBTITLE during playback to switch the subtitle language, this does not affect the settings here.

#### When you select Others

When you select **Others**, a language code input display is shown. Refer to *Language code chart for DVD* on page 128 to input the four-digit code of the desired language.

- 1 Touch 0 to 9 to input the language code.
- To cancel the inputted numbers, touch C.
- 2 Touch ENTER.

### **Setting the audio language**

You can set the preferred audio language.

## 1 Touch AUDIO LANGUAGE on the DVD setup menu.

An audio language menu is displayed.

#### 2 Touch the desired language.

The audio language is set.

• If you have selected **Others**, refer to *When you* select **Others** on this page.



- If the selected language is not recorded on the disc, the language specified on the disc is outputted.
- You can also switch the audio language by touching AUDIO during playback. (Refer to Changing audio language during playback (Multi-audio) on page 36.)
- Even if you use AUDIO during playback to switch the audio language, this does not affect the settings here.

### **Setting the menu language**

You can set the preferred language for displays of menus recorded on a disc.

# 1 Touch MENU LANGUAGE on the DVD setup menu.

A menu language menu is displayed.

#### 2 Touch the desired language.

The menu language is set.

• If you have selected **Others**, refer to *When you* select **Others** on the previous page.



If the selected language is not recorded on the disc, the language specified on the disc is displayed.

# Switching the assist subtitle on or off

If assist subtitles are recorded on a DVD disc, you can display them by turning the assist subtitle function on.

You can turn assist subtitles on or off as desired.

#### Touch ASSIST SUB TITLE on the DVD setup menu to turn assist subtitles on.

■ To turn the assist subtitle off, touch **ASSIST SUB TITLE** again. ■

### Setting the angle icon display

You can set it up so that the angle icon appears on scenes where the angle can be switched.

- Touch MULTI ANGLE on the DVD setup menu to turn angle icon display on.
- To turn the angle icon display off, touch **MULTI ANGLE** again. ■

#### Setting the aspect ratio

There are two kinds of display. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. Be sure to select the correct TV aspect for the display connected to **REAR DISPLAY OUT**.

- When using a regular display, select either LETTER BOX or PAN SCAN. Selecting 16:9 may result in an unnatural picture.
- If you select the TV aspect, the unit's display changes to the same setting.

# • Touch TV ASPECT on the DVD setup menu to select the TV aspect.

Touch **TV ASPECT** repeatedly until the desired TV aspect appears in the display.

- **16:9** Wide screen picture (16:9) is displayed as it is (initial setting)
- LETTER BOX The picture is the shape of a letterbox with black bands at the top and bottom of the screen
- PAN SCAN The picture is cut short at the right and left of the screen

### Notes

- When playing discs that do not specify PAN SCAN, playback is with LETTER BOX even if you select PAN SCAN setting. Confirm whether the disc package bears the IS:9 LB mark. (See page 12.)
- Some discs do not enable changing of the TV aspect. For details, refer to the disc's instructions.

### **Setting the parental lock**

Some DVD video discs let you use parental lock to restrict children from viewing violent and adult-oriented scenes. You can set the parental lock to your desired level.

 When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

#### Setting the code number and level

You need to have registered a code number for playing back discs with parantal lock.

### 1 Touch PARENTAL on the DVD setup menu.

### 2 Touch 0 to 9 to input a four digit code number.

■ To cancel the inputted numbers, touch **C**.

#### 3 Touch ENTER.

The code number is set, and you can now set the level.

## 4 Touch any of 1 to 8 to select the desired level.

The parental lock level is set.

 8 – Playback of the entire disc is possible (initial setting)

- 7 to 2 Playback of discs for children and non-adult-oriented discs is possible
- 1 Playback of discs for children only is possible

### Motes

- We recommend to keep a record of your code number in case you forget it.
- The parental lock level is recorded on the disc. Look for the level indication written at the disc package, included literature or on the disc itself. Parental lock of this unit is not possible if a parental lock level is not recorded in the disc.
- With some discs, the parental lock may be active only on the scenes with certain levels. The playback of those scenes will be skipped. For details, refer to the instruction manual that came with the discs.

#### Changing the level

You can change the set parental lock level.

### 1 Touch PARENTAL on the DVD setup menu.

### 2 Touch 0 to 9 to input the registered code number.

#### 3 Touch ENTER.

This enters the code number, and you can now change the level.

- If you input an incorrect code number, the icon on is displayed. Touch can input the correct code number.
- If you forget your code number, refer to *If you forget your code number* on the next page.

### 4 Touch any of 1 to 8 to select the desired level.

The new parental lock level is set.

#### If you forget your code number

Refer to *Changing the level* on the previous page, and touch **C** 10 times. The registered code number is canceled, letting you register a new one.

### Setting the still picture

The unit uses one of two processes when displaying a still picture from a DVD disc.

## • Touch STILL PICTURE on the DVD setup menu to select the setting.

Touch **STILL PICTURE** repeatedly until the desired setting appears in the display.

- AUTO FIELD or FRAME is selected automatically by this unit.
- FIELD Produces a stable, generally shakefree image.
- FRAME Produces a sharper image, but more prone to shake than field stills.

### To play back bonus groups

Some DVD audio discs have an extra 'bonus' group that requires a four-digit password to access. See the disc packaging for details and the password. When you try and play the bonus group, the password input screen will automatically appear.

- The bonus group can be played back after the password has been entered, until the disc is removed from the unit.
- 1 Touch BONUS GROUP on the DVD setup menu.
- 2 Touch 0 to 9 to input a four-digit password.
- If you input an incorrect password, touch C and then input the correct password.
- 3 Touch ENTER.

# Displaying your DivX® VOD registration code

In order to play DivX VOD (video on demand) content on this unit, you first need to register the unit with your DivX VOD content provider. You do this by generating a DivX VOD registration code, which you submit to your provider.

### • Touch DivX VOD on the DVD setup menu.

Your 8-digit registration code is displayed.

 Make a note of the code as you will need it when you register with a DivX VOD provider.

### Setting the DivX subtitle file

You can select whether to display DivX external subtitles or not.

- The DivX subtitles will be displayed even when **CUSTOM** is selected if no DivX external subtitle files exist.
- Touch DivX SUBTITLE on the DVD setup menu to select the desired subtitle setting.
  - ORIGINAL Display the DivX subtitles
  - CUSTOM Display the DivX external subtitles



- Up to 42 characters can be displayed on one line. If more than 42 characters are set, the line breaks and the characters are displayed on the next line.
- Up to 126 characters can be displayed on one screen. If more then 126 characters are set, the excess characters will not be displayed.

# Setting remote control code type

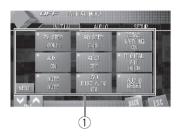
When the remote control operation switch is set to **DVD**, changing the remote control code type enables you to operate the Pioneer DVD player with the supplied remote control. There are three remote codes, code type **A**, code type **B** and code type **AVH**. When operating a multi-DVD player (e.g. XDV-P650/XDV-P6), select code **A**. When operating this unit, select code **AVH** 

- 1 Set the remote control selection switch on the left side of the remote control to the appropriate position with a pen tip or other pointed instrument.
  - If you select AVH mode, there is no need to take the following procedure.
  - If you select A/B mode, take the following procedure and change the code type to the appropriate type.
- 2 Press 0 and CLEAR on the remote control simultaneously to change the code type.

Initially, the code type is set to **A**. Each time you press **0** and **CLEAR** simultaneously on the remote control the code type switches between **A** and **B**.

#### **Initial Settings**

### **Adjusting initial settings**



Using the initial settings, you can customize various system settings to achieve optimal performance from this unit.

#### 1 Function display

Shows the function names.

### 1 Touch the source icon and then touch OFF to turn this unit off.

## 2 Touch the screen to display the touch panel keys.

### 3 Touch AV MENU to display the function names.

The function names are displayed and operable ones are highlighted.

- To go to the next group of function names, touch **NEXT**.
- To return to the previous group of function names, touch **PREV**

### 4 Touch ESC to return to the display of each source.

■ To return to the previous display, touch **BACK**.



You can use **AUTO EQ&TA** (auto-time alignment and auto-equalizing), only when **STANDARD** has been selected in **DSP MODE**. (Refer to *Switching the DSP setting mode* on page 110.)

### Setting the FM tuning step

The FM tuning step employed by seek tuning can be switched between 100 kHz, the preset step, and 50 kHz.

## • Touch FM STEP on the initial menu to select the FM tuning step.

Touching **FM STEP** will switch the FM tuning step between 50 kHz and 100 kHz. The selected FM tuning step will appear in the display.



If seek tuning is performed in 50 kHz steps, stations may be tuned in imprecisely. Tune in the stations with manual tuning or use seek tuning again.

### Setting the AM tuning step

The AM tuning step can be switched between 9 kHz, the preset step, and 10 kHz. When using the tuner in North, Central or South America, reset the tuning step from 9 kHz (531 kHz to 1602 kHz allowable) to 10 kHz (530 kHz to 1640 kHz allowable).

# • Touch AM STEP on the initial menu to select the AM tuning step.

Touching **AM STEP** will switch the AM tuning step between 9 kHz and 10 kHz. The selected AM tuning step will appear in the display.

### Switching the warning tone

If the front panel is not detached from the head unit within five seconds of turning off the ignition, a warning tone will sound. You can turn off the warning tone.

**Initial Settings** 

#### **Initial Settings**

### • Touch DETACH WARNING on the initial menu to turn warning tone on.

■ To turn warning tone off, touch **DETACH WARNING** again. ■

#### Switching the auxiliary setting

Auxiliary equipments connected to this unit can be activated individually. Set each AUX source to ON when using. About connecting or using auxiliary equipments, refer to *Using the AUX source* on page 115.

- Touch AUX1/AUX2 on the initial menu to turn each auxiliary setting on.
- To turn auxiliary setting off, touch **AUX1**/ **AUX2** again. ■

#### **Correcting distorted sound**

You can minimize distortion that may be caused by the equalizer curve settings. Setting an equalizer level high can cause distortion. If high sound is crippled or distorted, try switching to **LOW**. Normally, leave the setting at **HIGH** to ensure quality sound.

### • Touch DIGITAL ATT on the initial menu to switch the digital attenuator setting.

Touch **DIGITAL ATT** repeatedly until the desired setting appears in the display.

- **HIGH** High quality sound
- **LOW** Minimize distortion sound

#### Switching the sound muting/attenuation

Sound from this system is muted or attenuated automatically when the signal from the equipment with mute function is received.

- Sound from this system returns to normal when the muting or attenuation is canceled.
- Touch MUTE on the initial menu to select any of the muting, attenuation or off.

Touch **MUTE** until the desired setting appears in the display.

- MUTE Muting
- ATT -10dB Attenuation
- ATT -20dB Attenuation (ATT -20dB has a stronger effect than ATT -10dB)
- OFF Turn the sound muting/attenuation off

#### **Notes**

- The sound is turned off, MUTE is displayed and no audio adjustments are possible.
- The sound is attenuated, ATT is displayed and no audio adjustments, except volume control, are possible.
- Operation returns to normal when the phone connection is ended.

# Switching the automatic disc playback

You can turn automatic disc playback on or off when you insert a disc into the disc loading slot. When this function is on, the disc will be automatically played after it is inserted into the disc loading slot.

Initially, this function is set to on.

#### 20

#### **Initial Settings**

- Touch DVD DISC AUTO on the initial menu to turn automatic disc playback on.
- To turn automatic disc playback off, touch **DVD DISC AUTO** again. ■

#### **Resetting the audio functions**

You can reset all audio functions except volume.



If you perform this operation, audio settings are erased. For this reason, we recommend that you record the settings in the sheet on page 129 after you have completed audio adjustments.

- 1 Touch AUDIO RESET on the initial menu.
- 2 Touch RESET.

**Proceed with reset?** appears and asks you to confirm it.

3 Touch RESET again to reset audio functions.

**Reset completed** is displayed and the audio settings are reset.

 $\blacksquare$  To cancel resetting the audio functions, touch CANCEL.  $\blacksquare$ 

# Switching the DSP setting mode

This unit features two operation modes: the network mode and the standard mode. You can switch between modes as desired. Initially, the DSP setting is set to the standard mode.

 Switching the DSP mode erases the current adjusting audio settings (LAST MEMORY). If needed, memorize it into custom settings (CUSTOM1, CUSTOM2 or CUSTOM3).

- 1 Touch DSP MODE on the initial menu.
- 2 Touch either of the following touch panel keys to select the desired mode.
  - STANDARD Standard mode
  - NETWORK Network mode
- 3 Touch CHANGE to change the mode.
- To cancel changing the mode, touch **CANCEL**. ■

#### Setting the optical input

When connecting a DVD player, select S-DVD.

- Touch OPTICAL INPUT on the initial menu to select the optical input setting. Touch OPTICAL INPUT until the desired setting appears in the display.
  - OFF No DVD player is connected
  - S-DVD DVD player/multi-DVD player ■

#### **Setting the TV signal**

When this unit is connected to a TV tuner, you need to adjust the TV signal suitable to your country TV signal setting.

- This function is initially set to AUTO so that this unit automatically adjusts the TV signal setting.
- Touch TV FORMAT on the initial menu to select an appropriate TV signal.

Touching **TV FORMAT** switches TV signal settings in the following order:

AUTO—PAL—NTSC—PAL-M—SECAM

#### **Initial Settings**



About your country TV signal, consult with your nearest Pioneer dealer.

# Entering PIN code for Bluetooth wireless connection

To connect your cellular phone to this unit via Bluetooth wireless technology, you need to enter PIN code on your phone to verify the connection. The default code is **0000**, but you can change this in this function.

- With some Bluetooth audio players, you may be required to enter to this unit in advance PIN code of your Bluetooth audio player, in order to set this unit ready for a connection from your Bluetooth audio player.
- Only when Bluetooth adapter (e.g. CD-BTB100) is connected to this unit, you can operate this function.
- **1** Touch PIN EDIT on the initial menu. PIN code input display appears.
- 2 Touch 0 to 9 to input the PIN code of your Bluetooth audio player.
- To cancel the inputted numbers, touch C.
- 3 After inputting PIN code (up to 16 digits), touch ENTER.

The PIN code you entered is stored in this system.

#### **Setting the security indicator**

The LED indicator (security indicator) will flash when front panel is detached from the head unit. You can turn this indicator on or off.

- Touch SECURITY INDICATOR on the initial menu to turn security indicator on.
- To turn security indicator off, touch **SECURITY INDICATOR** again. ■

# Changing languages for CAUTION

Some operations on this unit are prohibited while driving or needs to be paid a careful attention when operating. In such case, a caution appears on the display. You can change the language of the cautions at this setting.

- 1 Touch CAUTION LANGUAGE on the initial menu.
- **2** Touch the desired language. The language for CAUTION is set. •

## Switching the button illumination

This unit is equipped with two button illumination colors, white and red. You can select the desired button illumination color.

#### Press SOUND SETTING and hold to select the desired color.

Pressing and holding **SOUND SETTING** will switch the illumination color between white and red.

# Switching the display on the sub-display

You can switch between the displays on the sub-display.

### • Press 2CH/Multi CH and hold to switch the display.

Press and hold **2CH/Multi CH** repeatedly to switch between the following settings: Source display—clock display—OFF

# Adjusting the screen Changing the wide screen mode

You can select a desired mode for enlarging a 4:3 picture to a 16:9 one.

#### Press WIDE to select the desired setting.

Press **WIDE** repeatedly to switch between the following settings:

FULL (full)—JUST (just)—CINEMA (cinema)— ZOOM (zoom)—NORMAL (normal)—AUTO (auto)

 You can select AUTO only when selecting DVD as the source.

#### FULL (full)

A 4:3 picture is enlarged in the horizontal direction only, giving you a 4:3 TV picture (normal picture) without any omissions.

#### JUST (just)

The picture is enlarged slightly at the center and the amount of enlargement increases horizontally to the ends, enabling you to enjoy a 4:3 picture without sensing any disparity even on a wide screen.

#### CINEMA (cinema)

The picture is enlarged by the same proportion as **FULL** or **ZOOM** in the horizontal direction and by an intermediate proportion between **FULL** and **ZOOM** in the vertical direction; ideal for a cinema-sized picture (wide screen picture) where captions lie outside.

#### ZOOM (zoom)

A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized picture (wide screen picture).

#### **NORMAL** (normal)

A 4:3 picture is displayed as it is, giving you no sense of disparity since its proportions are the same as that of the normal picture.

#### **AUTO (auto)**

In this mode, this unit selects the appropriate setting from among **FULL**, **JUST**, **CINEMA**, **ZOOM** or **NORMAL** automatically.



- Different settings can be memorized for each video source.
- When video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear different.

- Remember that using the wide mode feature
  of this system for commercial or public viewing purposes may constitute an infringement
  on the author's rights protected by the Copyright Law.
- The video image will appear coarser when viewed in CINEMA or ZOOM mode.

#### **Changing the picture adjustment**

You can adjust **BRIGHTNESS** (brightness), **CONTRAST** (contrast), **COLOR** (color) and **HUE** (hue) for each source and rear view camera.

- The adjustments of BRIGHTNESS and CONTRAST are stored separately for light ambient (daytime) and dark ambient (nighttime). A sun or moon is displayed to the left of BRIGHTNESS and CONTRAST, respectively, as the ambient light sensor determines brightness or darkness.
- You cannot adjust **HUE** for PAL video.
- You cannot adjust **HUE** for **DVD** source.
- You cannot adjust COLOR or HUE for the audio source.

### 1 Press V.ADJUST to display PICTURE ADJUSTMENT.

### 2 Touch **<** or **>** to adjust the following items.

The adjustment function names are displayed and adjustable ones are highlighted. Each time you touch **<** or **>** it increases or decreases the level of selected item. **−24** to **+24** is displayed as the level is increased or decreased.

- BRIGHTNESS Adjust the black intensity
- CONTRAST Adjust the contrast
- COLOR Adjust the color saturation
- **HUE** Adjust the tone of color (red is emphasized or green is emphasized)
- **DIMMER** Adjust the brightness of display

- **REAR VIEW CAMERA/SOURCE** Switch the picture adjustment modes
- You can adjust the picture adjustment for rear view camera only when **CAMERA** is turned on. (Refer to When rear view camera is connected to AV input 2 on page 101.)
- If you are viewing image from the rear view camera, you cannot adjust picture adjustment for the selected source.
- With some rear view cameras, picture adjustment may not be possible.

#### 3 Touch ESC to hide the touch panel keys.

#### Adjusting the dimmer

The adjustment of **DIMMER** is stored separately for each ambient light; daytime, evening and nighttime. The brightness of LCD screen will be adjusted to optimum level automatically in accordance with the ambient light based on the setting values.

 The icons indicating the current ambient brightness used for adjusting BRIGHTNESS and CONTRAST may differ from DIMMER slightly.

### 1 Press V.ADJUST to display PICTURE ADJUSTMENT.

The ambient light level used as the standard for adjusting **DIMMER** appears above the level bar.

- Red sun Adjust the brightness for bright ambient light (daytime)
- Orange sun Adjust the brightness for intermediate brightness (evening)
- Yellow moon Adjust the brightness for dark ambient light (nighttime)

### 2 Touch **〈** or **〉** for DIMMER to adjust the brightness.

Each time you touch **<** or **>** it moves cursor towards the left or the right.

The level indicates the brightness of the screen being adjusted. The farther cursor moves to the right, the brighter the screen.

### 3 Touch ESC to hide the touch panel keys. ■

# Selecting the background display

You can display the thumbnails of available background pictures/visuals and select one to set your background display. The selection can be made each for the audio source group (playing CD, listening to Tuner, etc.), telephone source and the movie source group (watching DVD, AV, etc.).

#### 1 Press ENTERTAINMENT.

Thumbnails of background pictures/visuals appear on the display.

### 2 Touch one of the thumbnails that you want to display in the background.

The selected picture/movie is displayed at the background.



In the following cases, background images from that source cannot be selected:

- . When there is no disc in the unit.
- When the AV (AV input) is not set to VIDEO (refer to page 100).

# Adjusting the response positions of the touch panels (Touch Panel Calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that

respond to your touch, adjust the response positions of the touch panel. There are two adjustment methods: 4-point adjustment, in which you touch four corners of the screen; and 16-point adjustment, in which you make fine-adjustments on the entire screen.

Make sure to use the supplied pen for adjustment, and gently touch the screen. If you press the touch panel forcefully, the touch panel may be damaged. Do not use a sharp pointed tool such as ballpoint pen or a mechanical pen. Otherwise the screen is damaged.

### 1 Press V.ADJUST to display PICTURE ADJUSTMENT.

#### 2 Press and hold V.ADJUST.

The 4-point touch panel adjustment screen appears.

# 3 Touch each of the arrows on the four corners of the screen with the touch panel adjustment pen.

To cancel the adjustment, press and hold
 V.ADJUST.

### 4 Press V.ADJUST to complete the 4-point adjustment.

The adjusted position data is saved.

• Do not turn off the engine while saving the adjusted position data.

### 5 Press V.ADJUST to proceed to the 16-point adjustment.

The 16-point touch panel adjustment screen appears.

■ To cancel the adjustment, press and hold **V.ADJUST**.

# 6 Gently touch the center of the + mark displayed on the screen with the touch panel adjustment pen.

After you touch all the marks, the adjusted position data is saved.

- Do not turn off the engine while saving the adjusted position data.
- 7 Press and hold V.ADJUST to complete the adjustment.



If touch panel adjustment cannot be performed properly, consult your local Pioneer dealer.

#### **Using the AUX source**

This unit can control an auxiliary equipment such as VCR or portable device (sold separately). When connected, auxiliary equipment is automatically recognized as AUX source and assigned to **AUX**.

#### **About AUX connection method**

You have two methods to connect auxiliary equipment to this unit.

#### Stereo mini pin plug cable (AUX1)

When connecting auxiliary equipment using a stereo mini plug cable

• Insert the stereo mini plug into the microphone/auxiliary input jack on this unit. For more details, refer to the installation manual.

#### **IP-BUS-RCA** interconnector (AUX2)

When connecting auxiliary equipment using an IP-BUS-RCA Interconnector (sold separately)

• Use an IP-BUS-RCA Interconnector such as the CD-RB20/CD-RB10 (sold separetely) to connect this unit to auxiliary equipment featuring RCA output.

For more details, refer to the IP-BUS-RCA Interconnector owner's manual.

 You can only make this type of connection if the auxiliary equipment has RCA outputs.

#### Selecting AUX as the source

- Touch the source icon and then touch AUX1/AUX2 to select AUX as the source.
- If the auxiliary setting is not turned on, **AUX** cannot be selected. For more details, see *Switching the auxiliary setting* on page 109.

#### **Setting the AUX title**

The title displayed for the **AUX** source can be changed.

- Each title can be up to 10 characters long.
- 1 After you have selected AUX as the source, touch AV MENU and FUNCTION and then touch NAME EDIT.
- 2 Touch the letter you wish to input.

For details concerning operation, refer to *Editing the name of sound settings* on page 96.

#### **Using the PGM button**

You can operate the preprogrammed functions for each source by using **PGM**.

- Press PGM to turn pause on when selecting the following sources:
  - **DVD** Built-in DVD player
  - S-DVD DVD player/multi-DVD player
  - M-CD Multi-CD player
  - iPod iPod

#### 21

#### **Other Functions**

- BT AUDIO Bluetooth audio player
- To turn pause off, press **PGM** again.
- Press PGM and hold to turn BSM on when selecting FM or AM as the source.

Press **PGM** and hold until the BSM turns on.

- To cancel the storage process, press **PGM** again.
- Press PGM and hold to turn BSSM on when selecting TV as the source.

Press **PGM** and hold until the BSSM turns on.

 $\blacksquare$  To cancel the storage process, press  $\mathbf{PGM}$  again.  $\blacksquare$ 

#### **Troubleshooting**

#### Common

Symptom	Cause	Action (See)		
Power doesn't turn on. The unit doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.		
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rating.		
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Press <b>RESET</b> . (Page 12)		
Operation with the remote control isn't possible.	The remote control operation mode is incorrect.	Switch to the correct remote control mode. (Page 19)		
The unit does not operate cor- rectly even when the appropriate remote control buttons are pressed.	The remote control code is incorrect.	Make sure the remote control selection switch setting and code type setting are the same. (Page 107)		
pressed.	Battery power is low.	Load new battery. (Page 13)		
	Some operations are prohibited with certain discs.	Check by using another disc.		
Playback is not possible.	The disc is dirty.	Clean disc. (Page 121)		
	The loaded disc is a type this unit cannot play.	Check what type the disc is.		
	Non compatible video system disc is loaded.	Change to a disc compatible to your video system.		
No sounds are heard.	Cables are not connected correctly.	Connect the cables correctly.		
The volume level will not rise.	The unit is performing still, slow motion or frame-by-frame playback.	There is no sound during still, slow motion or frame-by-frame playback.		
	The front, rear, left and right speakers are not properly adjusted in level balance.	Adjust the relative levels between the speakers correctly. (Page 82)		
Sound is not heard over a specific speaker.	The speaker size is set to <b>OFF</b> .	Make the correct size setting for the speaker. (Page 91)		
	The speaker level is set too low.	Increase the speaker level setting to get the balance right with the other speakers. (Page 94)		
	The center speaker size is set to <b>SMALL</b> or <b>LARGE</b> whereas no center speaker is installed.	Set the center speaker size to <b>OFF</b> . (Page 91)		
There is no picture.	The parking brake cord is not connected.	Connect a parking brake cord, and apply the parking brake.		
	The parking brake is not applied.	Connect a parking brake cord, and apply the parking brake.		

Symptom	Cause	Action (See)	
The icon $\bigcirc$ is displayed, and operation is not possible.	The operation is prohibited for the disc.	This operation is not possible.	
	The operation is not compatible with the disc's organization.	This operation is not possible.	
The picture stops (pauses) and the unit cannot be operated.	Reading of data has become impossible during playback.	After stopping playback once, start playback once more.	
There is no sound.	The volume level is low.	Adjust the volume level.	
Volume level is low.	The attenuator is on.	Turn the attenuator off.	
There is audio and video skipping.	The unit is not firmly secured.	Secure the unit firmly.	
The picture is stretched, the aspect is incorrect.	The aspect setting is incorrect for the display.	Select the appropriate setting for your display. (Page 104)	
When the ignition switch is turned ON (or turned to ACC), the motor sounds.	The unit is confirming whether a disc is loaded or not.	This is a normal operation.	
Nothing is displayed. The touch panel keys cannot be used.	The rear view camera is not connected. The setting for <b>REAR VIEW CAMERA IN</b> is incorrect.	Connect a rear view camera. Press and hold <b>V.ADJUST</b> to return to the source display and then select the correct setting for <b>REAR VIEW CAMERA IN</b> . (Page 101)	

#### Problems during DVD playback

Symptom	Cause	Action (See)		
Playback is not possible.	The loaded disc has a different region number from this unit.	Replace the disc with one featuring the same region number as this unit. (Page 8, Page 134)		
A parental lock message is dis- played and playback is not pos- sible.	Parental lock is on.	Turn parental lock off or change the level. (Page 105)		
Parental lock cannot be can-	The code number is incorrect.	Input the correct code number. (Page 105)		
celed.	You have forgotten your code number.	Press <b>CLEAR</b> 10 times to cancel the code number. (Page 106)		
Dialog language (and subtitle language) cannot be switched.	The DVD playing does not feature multiple language recordings.	You cannot switch among multiple languages if they are not recorded on the disc.		
	You can only switch between items indicated in the disc menu.	Switch using the disc menu.		
No subtitles are displayed.	The DVD playing does not feature subtitles.	Subtitles are not displayed if they are not recorded on the disc.		
	You can only switch between items indicated in the disc menu.	Switch using the disc menu.		
Playback is not with the audio language and subtitle language settings selected in <b>DVD SETUP MENU</b> .	The DVD playing does not feature dialog or subtitles in the language selected in <b>DVD SETUP MENU</b> .	Switching to a selected language is not possible if the language selected in <b>DVD SETUP MENU</b> is not recorded on the disc.		

Symptom	Cause	Action (See)		
Switching the viewing angle is not possible.	The DVD playing does not feature scenes shot from multiple angles.	You cannot switch between multiple angles if the DVD does not feature scenes recorded from multiple angles.		
	You are trying to switch to multiple angle viewing of a scene that is not recorded from multiple angles.	Switch between multiple angles when watching scenes recorded from multiple angles.		
The picture is extremely unclear/distorted and dark during playback.	The disc features a signal to prohibit copying. (Some discs may have this.)	Since this unit is compatible with the copy guard analog copy protect system, when playing a disc that has a signal prohibiting copying, the picture may suffer from horizontal stripes or other imperfections when viewed on some displays. This does not mean this unit is malfunctioning.		

#### Problems during Video CD playback

Symptom	Cause	Action (See)
The PBC (playback control) menu display cannot be called up.	The Video CD playing does not feature PBC.	This operation is not possible with Video CDs not featuring PBC.
Repeat play and track/time search are not possible.	The Video CD playing features PBC.	This operation is not possible with Video CDs featuring PBC.

#### **Error messages**

When you contact your dealer or your nearest Pioneer Service Center, be sure to record the error message.

Message	Cause	Action (See)		
ERROR-02-XX	Dirty disc	Clean disc.		
	Scratched disc	Replace disc.		
	The disc is loaded upside down	Check that the disc is loaded correctly.		
	Electrical or mechanical	Press <b>RESET</b> .		
DIFFERENT REGION DISC (REGION ERR)	The disc does not have the same region number as this unit	Replace the DVD video with one bearing the correct region number.		
NON-PLAYABLE DISC (NON- PLAY)	This type of disc cannot be played by this unit	Replace the disc with one this unit can play.		
	The inserted disc does not contain any files that can be played back	Replace disc.		
NON-PLAYABLE FILE (NON- PLAY)	The inserted disc contains DivX video files that cannot be played by this unit.	Switch to the other file that can be played by this unit.     Replace disc.		

Message	Cause	Action (See)		
THERMAL PROTECTION IN MOTION (TEMP)	The temperature of this unit is outside the normal operating range	Wait until the unit's temperature returns to within normal operating limits.		
FILE Skipped	The inserted disc contains WMA files that are protected by DRM	<ul><li>Play an audio file not protected by DRM.</li><li>Replace disc.</li></ul>		
PROTECT	All the files on the inserted disc are secured by DRM	Replace disc.		

#### **Understanding auto TA and EQ error messages**

When correct measurement of car interior acoustic characteristics is not possible using the auto TA and EQ, an error message may appear on the display. If an error message appears, refer to the table below to see what the problem is and the suggested method of correcting the problem. After checking, try again.

Message	Cause	Action
Error. Please check MIC.	Microphone is not connected.	Plug the supplied microphone securely into the jack.
Error. Please check front SP., Error. Please check FL SP., Error. Please check FR SP., Error. Please check center SP., Error. Please check rear SP., Error. Please check RL SP., Error. Please check RR SP., Error. Please check rear center SP., Error. Please check sub- woofer.	The microphone cannot pick up the measuring tone of a speaker.	Confirm that the speakers are connected correctly.     Correct the input level setting of the power amp connected to the speakers.     Set the microphone correctly.
Error. Please check noise.	The surrounding noise level is too high.	Stop your car in a place that is as quiet as possible, and switch off the engine, air conditioner or heater.     Set the microphone correctly.

#### **DVD** player and care

 Use only normal, round discs. If you insert irregular, non-round, shaped discs they may jam in the DVD player or not play properly.





- Check all discs for cracks, scratches or warping before playing. Discs that have cracks, scratches or are warped may not play properly. Do not use such discs.
- Avoid touching the recorded (non-printed) surface when handling the disc.
- Store discs in their cases when not in use.
- Keep discs out of direct sunlight and do not expose the discs to high temperatures.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a disc, wipe the disc with a soft cloth outward from the center.



- If the heater is used in cold weather, condensation may form on components inside
  the DVD player. Condensation may cause
  the DVD player to not operate properly. If
  you think that condensation is a problem
  turn off the DVD player for an hour or so to
  allow it to dry out and wipe any damp discs
  with a soft cloth to remove the moisture.
- Road shocks may interrupt disc playback.

#### **DVD** discs

- With some DVD video discs, it may not be possible to use certain functions.
- It may not be possible to play back some DVD video discs.
- It is not possible to play back DVD-ROM/ DVD-RAM discs.

#### **DVD-R/DVD-RW discs**

- Unfinalized DVD-R/-RW discs which have been recorded with the Video format (video mode) cannot be played back.
- It may not be possible to play back DVD-R/ DVD-RW discs, because of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc. on the lens of this unit.
- Playback of discs recorded on a personal computer may not be possible, depending on the application settings and the environment. Please record with the correct format. (For details, contact the manufacturer of the application.)
- DVD-R/-RW discs which have been recorded with the Video Recording format
  (VR mode) can be played back. However,
  unfinalized disc may not be played back.
  Unplayable disc should be finalized. In addition, finalized DVD-R DL (Dual Layer) disc cannot be recorded/edited.
- DVD-R DL (Dual Layer) discs which have been recorded with the Video Recording format (VR mode) can be played back.
   However, this unit is not compatible with Layer Jump recording mode.
- For more information about recording mode, please contact manufacture of DVD recorder or application.

 The following logo indicates that this unit is compatible with DVD-RW discs which have been recorded with the Video Recording format (VR mode).



- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this unit (in the case of audio data (CD-DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

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#### **Dual Discs**

- Dual Discs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Playback of the DVD side is possible with this unit. However, since the CD side of Dual Discs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this unit.
- Frequent loading and ejecting of a Dual
  Disc may result in scratches on the disc.
  Serious scratches can lead to playback problems on this unit. In some cases, a Dual
  Disc may become stuck in the disc loading
  slot and will not eject. To prevent this, we
  recommend you refrain from using Dual
  Disc with this unit.
- Please refer to the information from the disc manufacturer for more detailed information about Dual Discs.

#### CD-R/CD-RW discs

be ejected.

**AVCHD** recorded discs

• This unit is not compatible with discs re-

High Definition) format. Do not insert

corded in AVCHD (Advanced Video Codec

AVCHD discs. If inserted, the disc may not

- When CD-R/CD-RW discs are used, playback is possible only for discs which have been finalized.
- It may not be possible to play back CD-R/ CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc., on the lens of this unit.
- Playback of discs recorded on a personal computer may not be possible, depending on the application settings and the environment. Please record with the correct format. (For details, contact the manufacturer of the application.)
- Playback of CD-R/CD-RW discs may become impossible in case of direct exposure to sunlight, high temperatures, or the storage conditions in the vehicle.

#### WMA, MP3 and AAC files

- MP3 is short for MPEG Audio Layer 3 and refers to an audio compression technology standard.
- WMA is short for Windows Media<sup>™</sup> Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.

- AAC is short for Advanced Audio Coding and refers to an audio compression technology standard.
- This unit may not operate correctly depending on the application used to encode WMA files.
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of WMA/AAC files encoded with image data.
- This unit allows playback of compressed audio on CD-R/RW/ROM and DVD-R/RW/ ROM discs. Disc recordings compatible with level 1 and level 2 of ISO9660 and with the Romeo and Joliet file system can be played back.
- It is possible to play back multi-session compatible recorded discs.
- Compressed audio files are not compatible with packet write data transfer.
- The maximum number of characters which can be displayed for a file name, including the extension (.wma, .mp3 or .m4a), is 64, from the first character.
- The maximum number of characters which can be displayed for a folder name is 64.
- In case of files recorded according to the Romeo file system, only the first 64 characters can be displayed.
- The folder selection sequence for playback and other operations becomes the writing sequence used by the writing software. For this reason, the expected sequence at the time of playback may not coincide with the actual playback sequence. However, there also is some writing software which permits setting of the playback order.
- Some audio CDs contain tracks that merge into one another without a pause. When these discs are converted to compressed audio and burned to a CD-R/RW/ROM or a DVD-R/RW/ROM, the files will be played

back on this player with a short pause between each one, regardless of the length of the pause between tracks on the original audio CD.

#### 1mportant

- When naming a compressed audio file, add the corresponding filename extension (.wma, .mp3 or .m4a).
- This unit plays back files with the filename extension (.wma, .mp3 or .m4a) as a compressed audio (WMA/MP3/AAC) file. To prevent noise and malfunctions, do not use these extensions for files other than these files.

#### MP3 additional information

- Files are compatible with the ID3 Tag Ver. 1.0, 1.1, 2.2 and 2.3 formats for display of album (disc title), track (track title), artist (track artist) and comments. Ver. 2.x of ID3 Tag is given priority when both Ver. 1.x and Ver. 2.x exist.
- You can play back MP3 files in the frequencies from 8 kHz to 48 kHz.
- This unit is compatible with the emphasis function.
- There is no m3u playlist compatibility.
- There is no compatibility with the MP3i (MP3 interactive) or mp3 PRO formats.
- The sound quality of MP3 files generally becomes better with an increased bit rate.
   This unit can play recordings with bit rates from 8 kbps to 320 kbps, but in order to be able to enjoy sound of a certain quality, we recommend using only discs recorded with a bit rate of at least 128 kbps.

#### **WMA** additional information

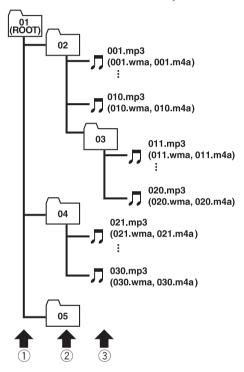
- This unit plays back WMA files encoded by Windows Media Player version 7, 7.1, 8, 9 and 10.
- You can play back WMA files in the frequencies from 8 kHz to 48 kHz.
- The sound quality of WMA files generally becomes better with an increased bit rate. This unit can play recordings with bit rates from 5 kbps to 320 kbps, but in order to be able to enjoy sound of a certain quality, we recommend using discs recorded with a higher bit rate.
- This unit doesn't support the following formats.
  - Windows Media Audio 9 Professional (5.1ch)
  - Windows Media Audio 9 Lossless
  - Windows Media Audio 9 Voice

#### **AAC additional information**

- This unit plays back AAC files encoded by iTunes® version 6.0.5 and earlier.
- Sampling frequency: 8 kHz to 44.1 kHz
- The sound quality of AAC files generally becomes better with an increased transmission rate. This unit can play recordings with transmission rates from 8 kbps to 320 kbps, but in order to be able to enjoy sound of a certain quality, we recommend using discs recorded with a higher transmission rate.
- This unit doesn't support the following formats.
  - Apple Lossless 🔳

# About folders and compressed audio files

 An outline of a disc with compressed audio on it is shown below. Subfolders are shown as folders in the folder currently selected.



- First level
- ② Second level
- 3 Third level



 This unit assigns folder numbers. The user cannot assign folder numbers.

- It is not possible to check folders that do not include compressed audio files. (These folders will be skipped without displaying the folder number.)
- Compressed audio files in up to 8 tiers of folders can be played back. However, there is a delay in the start of playback on discs with numerous tiers. For this reason we recommend creating discs with no more than 2 tiers.
- It is possible to play back up to 255 folders on one disc.

#### JPEG picture files

- JPEG is short for Joint Photographic Experts Group and refers to a still image compression technology standard.
- Files are compatible with Baseline JPEG and EXIF 2.1 still image up to resolution of  $8.192 \times 7.680$ . (EXIF format is used most commonly with digital still cameras.)
- EXIF format that processed by the personal computer may not be played back.
- There is no progressive JPEG compatibility.

### **Important**

- When naming a JPEG picture file, add the corresponding filename extension (.jpg, .jpeg or .jpe).
- This unit plays back files with the filename extension (.jpg, .jpeg or .jpe) as a JPEG picture file. To prevent malfunctions, do not use these extensions for files other than JPEG picture files.

#### **DivX video files**

 This unit corresponds to DivX video format implemented in relation to DivX standards.

- This unit cannot play back DivX Ultra format.
- · DivX files without video data cannot be recognized as DivX file.
- Compatible audio codecs are MP2. MP3. and Dolby Digital. There is no compatibility with LPCM.
- This unit can play audio recordings with bit rates from 8 kbps to 320 kbps (CBR) and VBR.
- This unit can play audio recordings with sampling frequencies from 8 kHz to 48 kHz.
- Compatible file extension for the external subtitle is .srt.
- Depending on the file information composition such as the number of audio stream, there may be a slight delay in the start of playback on discs.
- Some special operation may be prohibited because of the composition of DivX files.
- DivX files downloaded only from DivX partner site are guarantee of proper operation. Unauthorized DivX file may not operate properly.
- DRM rental file cannot be operated until starting playing back.
- This unit corresponds to a DivX file display up to 1590 minutes 43 seconds. Also, search operation beyond this time limit is prohibited.
- If a file contains more than 4 GB, playback is stopped on the way.
- DivX VOD file playback requires ID code of this unit to DivX VOD provider. About ID code, refer to Displaying your DivX® VOD reaistration code on page 106.
- Plays all versions of DivX® video (including) DivX® 6) with standard playback of DivX® media files
- For more details about DivX, visit the following site:

http://www.divx.com/



- When naming a DivX video file, add the corresponding filename extension (.avi or.divx).
- This unit plays back files with the filename extension (.avi or.divx) as a DivX video file. To prevent noise and malfunctions, do not use these extensions for files other than DivX video files.

#### Using the display correctly



#### A CAUTION

- If liquid or foreign matter should get inside this unit, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Do not use the unit in this condition because doing so may result in a fire, electric shock, or other failure.
- If you notice smoke, a strange noise or smell. or any other abnormal signs from the display, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Using this unit in this condition may result in permanent damage to the system.
- Do not disassemble or modify this unit, as there are high-voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest authorized PIONEER Service Station for internal inspection, adjustments or repairs.

#### Handling the display

· When the display is subjected to direct sunlight for a long period of time, it will become very hot resulting in possible damage to the LCD screen. When not using this unit, close the display and avoid exposing it to direct sunlight.

- The display should be used within the temperature ranges shown below. Storage temperature range: -20 °C to +80
  - At temperatures higher or lower than the operating temperature range the display may not operate normally.
- The LCD screen of this unit is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not place anything on the display when it is opened. Also, do not attempt to carry out angle adjustment, or open/close the display by hand. Applying strong force to the display may damage it.
- Do not push the LCD screen with much force as this may scratch it.
- Be careful not to place anything between the display and the main body when the display is opening or closing. If an object gets between the display and main body, the display may stop working.

#### Liquid crystal display (LCD) screen

- If the display is near the vent of an air conditioner when it is opened, make sure that air from the air conditioner is not blowing on it. Heat from the heater may damage the LCD screen, and cool air from the cooler may cause moisture to form inside the display resulting in possible damage. Also, if the display is cooled down by the cooler, the screen may become dark, or the life span of the small fluorescent tube used inside the display may be shortened.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a problem with the display.

- At low temperatures, the LCD screen may be dark for a while after the power is turned on.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a portable phone, keep the antenna of the portable phone away from the display to prevent disruption of the video by the appearance of spots, colored stripes, etc.

### Keeping the display in good condition

- When removing dust from the screen or cleaning the display, first turn the system power off, then wipe with the supplied cloth.
- When wiping the screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

#### **Small fluorescent tube**

- A small fluorescent tube is used inside the display to illuminate the LCD screen.
  - The fluorescent tube should last for approximately 10 000 hours, depending on operating conditions. (Using the display at low temperatures reduces the service life of the fluorescent tube.)
  - When the fluorescent tube reaches the end of its useful life, the screen will be dark and the image will no longer be projected. If this happens, consult your dealer or the nearest authorized PIONEER Service Station.

# Language code chart for DVD Language (code), input code Language (code)

Language (anda) innu
Language (code), inpu
Japanese (ja), <b>1001</b>
English (en), <b>0514</b>
French (fr), <b>0618</b>
Spanish (es), <b>0519</b>
German (de), <b>0405</b>
Italian (it), 0920
Chinese (zh), 2608
Dutch (nl), 1412
Portuguese (pt), 1620
Swedish (sv), 1922
Russian (ru), 1821
Korean (ko), 1115
Greek (el), <b>0512</b>
Afar (aa), <b>0101</b>
Abkhazian (ab), 0102
Afrikaans (af), <b>0106</b>
Amharic (am), <b>0113</b>
Arabic (ar), <b>0118</b>
Assamese (as), <b>0119</b>
Aymara (ay), <b>0125</b>
Azerbaijani (az), <b>0126</b>
Bashkir (ba), <b>0201</b>
Byelorussian (be), <b>0205</b>
Bulgarian (bg), <b>0207</b>
Bihari (bh), <b>0208</b>
Bislama (bi), <b>0209</b>
Bengali (bn), <b>0214</b>
Tibetan (bo), <b>0215</b>
Breton (br), <b>0218</b>
Catalan (ca), <b>0301</b>
Corsican (co), <b>0315</b>
Czech (cs), 0319
Welsh (cy), 0325
Danish (da), <b>0401</b>
Bhutani (dz), <b>0426</b>
Esperanto (eo), 0515
Estonian (et), <b>0520</b>
Basque (eu), <b>0521</b>
Persian (fa), <b>0601</b>
Finnish (fi), <b>0609</b>
Fiji (fj), <b>0610</b>
Faroese (fo), <b>0615</b>
Frisian (fy), <b>0625</b>
Irish (ga), <b>0701</b>
Scots-Gaelic (gd), 0704
C-1:-: (-I) 0743

Language (code), input code Guarani (gn), 0714 Gujarati (gu), 0721 Hausa (ha), 0801 Hindi (hi). 0809 Croatian (hr), 0818 Hungarian (hu), 0821 Armenian (hy), 0825 Interlingua (ia), 0901 Interlingue (ie), 0905 Inupiak (ik), 0911 Indonesian (in), 0914 Icelandic (is), 0919 Hebrew (iw), 0923 Yiddish (ji), 1009 Javanese (iw), 1023 Georgian (ka), 1101 Kazakh (kk), 1111 Greenlandic (kl), 1112 Cambodian (km), 1113 Kannada (kn), 1114 Kashmiri (ks). 1119 Kurdish (ku). 1121 Kirghiz (ky), 1125 Latin (la), 1201 Lingala (In), 1214 Laothian (lo), 1215 Lithuanian (It), 1220 Latvian (lv), 1222 Malagasy (mg), 1307 Maori (mi), 1309 Macedonian (mk), 1311 Malayalam (ml), 1312 Mongolian (mn), 1314 Moldavian (mo). 1315 Marathi (mr), 1318 Malay (ms), 1319 Maltese (mt), 1320 Burmese (my), 1325 Nauru (na), 1401 Nepali (ne). 1405 Norwegian (no), 1415 Occitan (oc), 1503 Oromo (om), 1513 Oriya (or), 1518 Panjabi (pa), 1601 Polish (pl), 1612

Language (code), input code Pashto, Pushto (ps), 1619 Quechua (qu), 1721 Rhaeto-Romance (rm), 1813 Kirundi (rn). 1814 Romanian (ro), 1815 Kinyarwanda (rw), 1823 Sanskrit (sa), 1901 Sindhi (sd). 1904 Sangho (sg), 1907 Serbo-Croatian (sh), 1908 Sinhalese (si), 1909 Slovak (sk), 1911 Slovenian (sl), 1912 Samoan (sm), 1913 Shona (sn), 1914 Somali (so). 1915 Albanian (sq), 1917 Serbian (sr), 1918 Siswati (ss). 1919 Sesotho (st), 1920 Sundanese (su). 1921 Swahili (sw), 1923 Tamil (ta), 2001 Telugu (te), 2005 Tajik (tg), 2007 Thai (th), 2008 Tigrinya (ti), 2009 Turkmen (tk), 2011 Tagalog (tl), 2012 Setswana (tn), 2014 Tonga (to), 2015 Turkish (tr), 2018 Tsonga (ts), 2019 Tatar (tt), 2020 Twi (tw). 2023 Ukrainian (uk). 2111 Urdu (ur). 2118 Uzbek (uz), 2126 Vietnamese (vi), 2209 Volapük (vo), 2215 Wolof (wo), 2315 Xhosa (xh), 2408 Yoruba (yo), 2515 Zulu (zu), 2621

Galician (gl), 0712

### DSP adjustment value record sheet

Please make a copy of sheet below as desired.

Parametric equalizer setting (PARAMETRIC EQ) (when selecting multi-channel mode only)

Speaker unit	BAND	Frequency	Level	Q.Fac
	LOW			
FRONT LEFT	MID			
	HIGH			
	LOW			
FRONT RIGHT	MID			
	HIGH			
	LOW			
REAR LEFT	MID			
	HIGH			
	LOW			
REAR RIGHT	MID			
	HIGH			
	LOW			
FRONT CENTER	MID			
	HIGH			
	LOW			
REAR CENTER	MID			
	HIGH			

Graphic equalizer setting (GRAPHIC EQ) (when selecting 2-channel mode only)

Speaker unit	50	80	125	200	315	500	800	1.25k	2k	3.15k	5k	8k	12.5k
LEFT													
RIGHT													

#### Speaker setting (SPEAKER SETTING)

Speaker unit	Front center	Front	Rear	Rear center	Subwoofer
Setting					

#### **Cut-off frequency setting (CUT OFF)**

Speaker unit		FREQUENCY	SLOPE	PHASE
FRONT LEFT HIGH (network mode only)				
FRONT RIGHT HIGH (network mode only)				
FRONT LEFT MID (network mode only)	LOW PASS			_
	HIGH PASS			_
FRONT RIGHT MID (network mode only)	LOW PASS			_
	HIGH PASS			_
FRONT LEFT (standard mode only)				_
FRONT RIGHT (standard mode only)				_
REAR LEFT				_
REAR RIGHT				_
FRONT CENTER				_
REAR CENTER				_
SUBWOOFER				

#### Time alignment setting (TIME ALIGNMENT) and speaker level setting (SPEAKER LEVEL)

Speaker unit	TIME ALIGNMENT	SPEAKER LEVEL
Tweeter left		
Tweeter right		
Front center		
Front left		
Front right		
Rear left		
Rear right		
Rear center		
Subwoofer		

Tweeters are available on the network mode only.

#### **Terms**

#### AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG 2 and MPEG 4.

#### **Aspect ratio**

This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

#### Bit rate

This expresses data volume per second, or bps (bits per second) units. The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

#### **Bonus group**

An 'extra' group on some DVD audio discs that requires a key number to access.

#### **Browsable pictures**

A feature of some DVD audio discs in which you can browse still pictures recorded on the disc while the audio is played back.

#### Chapter

DVD titles are in turn divided into chapters which are numbered in the same way as the chapters of a book. With DVD video discs featuring chapters, you can quickly find a desired scene with chapter search.

#### DivX

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks.

Many DivX media files are available for download online, and you can create your own using your personal content and easy-to-use tools from DivX.com.

#### **DivX Certified**

DivX Certified products are officially tested by the creators of DivX and guaranteed to play all versions of DivX video, including DivX 6.

#### **Dolby Digital**

Dolby Digital provides multi-channel audio from up to 5.1 independent channels. This is the same as the Dolby Digital surround sound system used in theaters.

#### **Dolby Digital EX**

Dolby Digital EX creates six full-bandwidth output channels from 5.1-channel sources. This is done using a matrix decoder that derives three surround channels from the two in the original recording.

#### Dolby Pro Logic II

Dolby Pro Logic II can create five full-bandwidth output channels from two-channel sources. This new technology enables a discrete 5-channel playback with 2 front channels, 1 center channel, and 2 rear channels. A music mode is also available for 2-channel sources in addition to the movie mode.

#### DTS

This stands for Digital Theater Systems. DTS is a surround system delivering multi-channel audio from up to 6 independent channels.

#### DTS 96/24

DTS 96/24 is an extension of the original DTS Digital Surround which offers high quality 96 kHz/24-bit audio using a DTS 96/24 decoder. This format is also fully backward compatible with all existing decoders. This means that DVD players can play this software using a conventional DTS 5.1 channel decoder.

#### DTS Neo:6

DTS Neo:6 can generate 6.1 channel surround sound from any matrixed stereo source (such as video or TV) and from 5.1 channel sources. It uses both the channel information already encoded into the source, as well as its ownprocessing to determine channel localization (with two channel sources, the ".1" subwoofer channel is generated by bass management in the receiver). Two modes (Cinema and Music) are available using DTS Neo:6 with two channel sources.

#### **DTS-ES**

DTS-ES is a decoder that is capable of decoding both DTS-ES Discrete 6.1 and DTS-ES Matrix 6.1 encoded sources. DTS-ES Discrete 6.1 gives 'true' 6.1 channel sound, with a completely separate (discrete) surround back channel. DTS-ES Matrix 6.1 has a surround back channel matrixed into the surround left/right channels. Both sources are also compatible with a conventional DTS 5.1 channel decoder.

#### **Dynamic range control**

Dolby Digital has a function for compressing the difference between the loudest and softest sounds: Dynamic range control. This control ensures sounds with an increased dynamic range are heard clearly even at low volume levels.

#### EXIF (Exchangeable image file)

A file format developed by Fuji Photo Film for digital still cameras. Digital cameras from various manufacturers use this compressed file format which carries date, time and thumbnail information, as well as the picture data.

#### Group

A collection of tracks on a DVD audio disc. Equivalent to a DVD video title.

#### ID3 tag

This is a method of embedding track-related information in an MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted as to the number of characters, the information can be viewed when the track is played back.

#### ISO9660 format

This is the international standard for the format logic of CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels.

#### Level 1:

The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters and half-byte numerals and the "\_" sign, with a file-extension of three characters).

#### Level 2:

The file name can have up to 31 characters (including the separation mark "." and a file extension). Each folder contains less than 8 hierarchies.

#### **Extended formats**

Joliet:

File names can have up to 64 characters. Romeo:

File names can have up to 128 characters.

#### **JPEG**

This stands for Joint Photographic Experts Group, and is an international still image compression standard.

### Linear PCM (LPCM)/Pulse code modulation

This stands for linear pulse code modulation, which is the signal recording system used for music CDs and DVDs. Generally, DVDs are recorded with higher sampling frequency and bit rate than CDs. Therefore, DVDs can provide higher sound quality.

#### m3u

Playlists created using the "WINAMP" software have a playlist file extension (.m3u).

#### **MP3**

MP3 is short for MPEG Audio Layer 3. It is an audio compression standard set by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the level of a conventional disc.

#### **MPEG**

This stands for Moving Pictures Experts Group, and is an international video image compression standard. Some DVDs feature digital audio compressed and recorded using this system.

#### **MS ADPCM**

This stands for Microsoft adaptive differential pulse code modulation, which is the signal recording system used for the multimedia software of Microsoft Corporation.

#### **Multi-angle**

With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

#### Multi-audio (Multilingual dialog)

Some DVDs feature dialog recorded in multiple languages. Dialog in up to 8 languages

can be recorded on a single disc, letting you choose as desired.

#### **Multi-session**

Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than 2 sessions on one disc.

#### Multi-subtitle

Subtitles in up to 32 languages can be recorded on a single DVD, letting you choose as desired.

#### Number of quantization bits

The number of quantization bits is one factor in the overall sound quality; the higher the "bit-depth", the better the sound quality. However, increasing the bit-depth also increases the amount of data and therefore storage space required.

#### Packed PCM

A lossless compression system that enables more PCM audio to be stored on a DVD audio disc than would otherwise be possible.

#### **Packet write**

This is a general term for a method of writing on CD-R, etc., at the time required for a file, just as is done with files on floppy or hard discs.

#### **Parental lock**

Some DVD video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

#### Playback control (PBC)

This is a playback control signal recorded on Video CDs (Version 2.0). Using menu displays provided by Video CDs with PBC lets you enjoy playback of simple interactive software and software with search functions. You can also enjoy viewing high- and standard-resolution still images.

**Region number** 

DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player. This unit's region number is displayed on the bottom of the unit.

Slideshow

A feature of some DVD discs in which still pictures recorded on the disc cycle automatically while the audio is played back.

#### Title

DVD video discs have high data capacity, enabling recording of multiple movies on a single disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

#### **VBR**

VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression-priority sound quality.

#### **WMA**

WMA is short for Windows Media<sup>™</sup> Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later.

Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

#### **Specifications**

_				
G	Δ	n	Δ	ra

Rated power source ...... 14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC) Grounding system ...... Negative type Head unit: Max. current consumption ......3.7 A Dimensions (W  $\times$  H  $\times$  D): DIN Chassis ...... 178 × 50 × 160 mm Nose  $188 \times 58 \times 36 \text{ mm}$  $\Box$ Chassis ...... 178 × 50 × 165 mm Nose ...... 170 × 46 × 31 mm Weight .....2.5 kg Hideaway unit: Max, current consumption Dimensions (W  $\times$  H  $\times$  D)

#### Display

Screen size/aspect ratio ...... 7 inch wide/15:9 (effective display area: 152.4  $\times$  91.44 mm) Pixels ...... 1 152 000 (800 × 480 × 3) Type ......TFT active matrix, transmissive type Color system ......NTSC/PAL/PAL-M/SECAM compatible Storage temperature range Angle adjustment ...... 50° to 110° (initial settings: 90°)

......280 × 37 × 171 mm

Weight ......1.4 kg

#### Audio

Maximum power output ...... 50 W × 8 Continuous power output ... 22 W × 8 (50 Hz to 15 000 Hz. 5% THD, 4  $\Omega$  load, both channels driven) Load impedance ......4  $\Omega$  to 8  $\Omega$   $\times$  8 Preout max output level/output impedance Decoder ...... Linear PCM, Dolby Digital, Dolby Digital EX, Dolby EX, Dolby Pro Logic II, DTS, DTS-CD, DTS-ES (matrix, discrete), DTS 96/24, DTS Neo:6. AAC

#### Sound setting

Position	Front left/Front right/Front/
	All/Off
Parametric equalizer (multi-	channel mode):
Band	
Frequency	40/50/63/80/100/125/160/
	200/250/315/400/500/630/
	800/1k/1.25k/1.6k/2k/2.5k/
	3.15k/4k/5k/6.3k/8k/10k/
	12.5k Hz
Q Factor	1.2/3.6
Gain	±12dB (2 dB/step)
Graphic equalizer (2-channe	l mode):
Band	13 band
Frequency	50/80/125/200/315/500/800/
	1.25k/2k/3.15k/5k/8k/12.5k
	Hz
Q Factor	
Gain	±12dB (2 dB/step)
Speaker setting:	
Front	
Front center	Large/Small/Off
Rear	Large/Small/Off
Rear center	Large/Small/Off
Subwoofer	
Time alignment	0 cm to 500 cm (2.5 cm/
	step)
Speaker level	–24 dB to +10 dB (1 dB/
	step)

#### Cut-off frequency

Front (L/R independent) (Standard mode): HPF.

Frequency ...... 50/63/80/100/125/160/200 Slope .....-6/-12/-18 dB/oct Mute ......On/Off Front (L/R independent) (Network mode): High HPF: Frequency ...... 1.25/1.6/2/2.5/3.15/4/5/6.3/8/ 10/12.5 kHz Slope .....-6/-12 dB/oct Phase ......Normal/Reverse Low LPF Frequency ...... 1.25/1.6/2/2.5/3.15/4/5/6.3/8/ 10/12.5 kHz

Slope ...... 0 (Pass)/-6/-12 dB/oct Low HPF: Frequency ...... 50/63/80/100/125/160/200

Slope .....-6/-12/-18 dB/oct Mute .....On/Off

Front center:	
Frequency	. 50/63/80/100/125/160/200 Hz
Mute	6/-12/-18 dB/oct
Rear (L/R independent): HPF:	
, ,	. 50/63/80/100/125/160/200 Hz
Slope Mute	6/-12/-18 dB/oct . On/Off
Rear center: HPF:	
Frequency	. 50/63/80/100/125/160/200 Hz
Mute	6/-12/-18 dB/oct
Subwoofer: LPF:	
Frequency	. 50/63/80/100/125/160/200 Hz
Slope Phase Mute	
DVD Player	
System	DVD audio, DVD video, DVD-VR, Video CD, CD, WMA, MP3, AAC, DivX, JPEG system
Usable discs	,
Region number: for Middle East Asian a	and South African models
for Southeast Asian me	
	.3
for South American an	
Signal format: Sampling frequency	. 16/22.05/24/44.1/48/88.2/96/
Number of quantizatio	176.4/192 kHz n bits
Frequency response	.16/20/24; linear .5 Hz to 96 000 Hz (with DVD, at sampling frequency 192 kHz)
Signal-to-noise ratio	•

Dynamic range	100 dB (1 kHz) (CD: 98 dB (1 kHz))
Distortion	( ( //
Output level:	
Video	1.0 Vp-p/75 $\Omega$ (±0.2 V)
Audio	1.1 V (1 kHz, 0 dB)
Number of channels	2 (stereo), Digital 6 ch
MP3 decoding format	MPEG-1 & 2 Audio Layer 3
WMA decoding format	Ver. 7, 7.1, 8, 9, 10 (2ch
	audio)
	(Windows Media Player)
AAC decoding format	MPEG-4 AAC (iTunes® en-
	coded only) (.m4a)
DivX decoding format	Home Theater Ver. 3, 4, 5.2,
	6 (.avi, .divx)

#### FM tuner

_	07 5 1411 1 400 0 1411
Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	8 dBf (0.7 $\mu$ V/75 $\Omega$ , mono,
	S/N: 30 dB)
Signal-to-noise ratio	75 dB (IEC-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz,
	stereo)
	0.1 % (at 65 dBf, 1 kHz,
	mono)
Frequency response	30 Hz to 15 000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)

#### AM tuner

Frequency range	531 kHz to 1 602 kHz (9 kHz)
	530 kHz to 1 640 kHz (10
	kHz)
Usable sensitivity	18 μV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

#### Infrared remote control

Wavelength	945 nm	
Output	typ; 10 mw/sr per Infrared	ł
	LED	



Specifications and the design are subject to possible modifications without notice due to improvements.

### Index

A
Angle icon       37, 104         Aspect ratio       104, 131         Audio language       36, 52, 103
Bonus group
Chapter       131         Code number       105         Color       113         Contrast       113
DivX       131         DivX Certified       131         Dolby Digital       131         Dolby Digital EX       10, 131         Dolby Pro Logic II       131         DTS       131         DTS 96/24       131         DTS Neo:6       132         DTS-ES       10, 132         Dynamic range control       132
<b>E</b> EXIF
<b>G</b> Group132
<b>H</b> Hue113
JPEG132
Language code chart

M         Menu language         MPEG         Multi-angle       37,         Multi-audio       36, 52,         Multi-subtitle       36, 52,	133 133 133
Packed PCM	133 40
Region number 8,	134
Slideshow	
Title	
V Video CD	8
W Wide screen mode	112



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Printed in Japan <CRB2413-A> RC. RD. RI